

Occupational Distribution of Population in Eastern Uttar Pradesh A Study in Geographical Background

**A
THESIS
submitted to
The University of Allahabad**

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For the Degree of
Doctor of Philosophy in Geography

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ALLAHABAD

1978

PREFACE

Since 1951, India entered the phase of planned economic development by launching a series of Five Year Plans. Eastern Uttar Pradesh along with the rest of the country, thus, completed twenty years of planned economic development by March, 1971. In this very year a regular census of population was also undertaken which supplied the latest statistical details of various types for use in the preparation of the present thesis entitled, "Occupational Distribution of Population in Eastern Uttar Pradesh : A Study in Geographical Background". The period from 1951 to 1971 includes a span of fifteen years of planning covered under three successive Five Year Plans extending from April 1951 to March 1966, with a three years' gap from April 1966 to March 1969 as a pause and also a duration of two years extending from April 1969 to March 1971 of the Fourth Five Year Plan, which was concluded in March 1974. These development plans were formulated and executed with certain broad objectives laid down by the Planning Commission for all-round development of the country including the increase in per capita income of the people and the provision for more and more employment opportunities to them.

Many appreciable and note-worthy changes have taken place in the economic structure of the region since March 1971 onwards. But in this thesis the census data of 1971 have been broadly utilised to analyse the occupational distribution of population in Eastern Uttar Pradesh. According to this census,

the region presents a subsistence agrarian economy of the caste structured society of a rural area having its occupational pattern oriented mainly towards agriculture and allied activities which engaged as much as 84.1 percent of the total working population of the region. The working population of this region accounted for 31.3 percent of its total population and this proportion is quite low in comparison to some other states of the country and many advanced countries of the world. Surprisingly, as much as 16.1 percent of the total working population of this region was constituted by the non-effective population age groups i.e., the children below 14 years of age accounting for 5.5 percent and the persons above 60 years of age accounting for 10.6 percent. Their participation as active workers in the labour force of the region in such a big scale is, however, not desirable, particularly in a welfare state, because in case of children, the age below 14 years should be utilised for their schooling and training and in case of those above 60 years, the period would be necessary for rest and recouping health in general. It is mainly under the heavy economic strain that such a high proportion of non-effective population was made to join the working force in the region in order to earn its livelihood or to supplement its family income. Such a situation clearly indicates to the poor economic conditions of the people residing in the region.

A fast growing population is indeed a retarding factor to the quick economic development of the region. The economic structure in the area is less diversified and hence occupations

pursued are limited in number. This tends to generate the problems of unemployment, underemployment and disguised unemployment in the region, which have attained alarming proportions in recent years. It appears that a wrong policy of economic development has been mainly responsible for the present depressing economic conditions of the area and is pushing it on to the brink of disaster.

A perfect and ideal occupational pattern would certainly offer to each individual an opportunity for full development of his abilities and capabilities. It will also utilise the available man-power resource of a region in gainful activities. It is, therefore, necessary that any future plan aiming at the economic development of the region must ensure a faster economic growth of the area based on full utilisation of its manpower resources.

The best solution to the problems of unemployment and underemployment in this area must lie in agricultural development. In the industrial sector production oriented programmes particularly under small scale, village and cottage industries with greater employment potentialities must form the main core of any future industrial planning of the region. However, the development of agriculture must be suitably connected with the growth of industries so as to generate more employment opportunities in the area for better economic and social upliftment of the masses.

For a balanced economic development and full utilisation of human resources with a view to provide an ideal occupational

pattern in the region, it is essential to boost up its agrarian base. But at the same time small and large scale industries should not be neglected, which, in fact, form the apex of the modern economic structure of a region.

In Eastern Uttar Pradesh generally the flood plains are heavily populated due to their fertile nature and, therefore, the flood damages are also heavier there. Floods combined with droughts, in the event of the failure of monsoons, make the life of the people in the area very miserable. Hence, there is greater need for a combined development of agriculture and industries in the region. The efforts of the State Government should also be directed towards this aim. In the present work an attempt has been made to analyse the occupational structure of the population in Eastern Uttar Pradesh, the causal factors for such a distribution; the main directions of the growth and expansion of occupations in the primary, secondary and tertiary sectors and the prospects of the employment oriented production programmes which are suitable for the region and are likely to be undertaken in the frame-work of Rolling Plans to be launched shortly by the State Government for fuller utilisation of human and other resources of the state during the years to come. This is a pressing need for a comprehensive analysis with a view to provide employment opportunities to all the males and females of the state within the effective population age group (15-60 years) who are willing to join the labour force of the state. This would also be in accordance with the stand of the Janata Government, presently in power at the centre and in the several

states of the country.

As already indicated, this work covers a theme for the degree of Doctor of Philosophy in Geography presented to the University of Allahabad. It consists of nine chapters. Chapter I begins with a brief introduction of the region and the theme. It examines the significance of occupational studies, briefly reviews the major contributions of the scholars in this particular field and highlights the methods and techniques adopted by the author in the present work. Chapter II deals with the Physical Setting of the region. Chapter III discusses the Human Base and Geonomic Foundations so as to present a complete picture of the region, while Chapter IV examines the role of the elements of physical, social, cultural and personal environments as determinants of occupation.

Chapter V presents an analytical study of the working population by sectors, age-groups, and in terms of sex ratio during the post-independence era. It also provides similar details for the nonworking population at length.

Chapter VI gives the details of persons gainfully employed in economic activities of the primary sector which really forms the core of the occupational structure of the region. Chapters VII and VIII deal with the details of labour force gainfully engaged in secondary and tertiary sectors respectively.

Chapter IX, the last in the series, has a special significance, because in its first part it summarises the salient features of the distribution of working population based on

economic activities and also analyses the problems and the nature of unemployment, underemployment etc. with their magnitude and also the suitable remedial measures to be adopted for a faster economic development and the fuller utilisation of human and other resources of the region. ✓ If planning programmes are launched keeping in view the above analyses, the people of the state must certainly have a better prosperity. In its second part, this chapter which deals with problems, planning and prospects, analyses the conclusions arrived at and puts forth the suggestions for the future. In view of the special problems of the region, the development plans should be so envisaged and executed as to boost up the agrarian economy of the area in which the industrial sector must also play its due role. The economic structure of the region with its broad agricultural base must be assisted by small scale, ancillary, village and cottage industries along with its local handicrafts to augment the resources in the interest of the general welfare of the people.

This thesis seeks to provide some original contributions of knowledge in certain respects and also a critical examination and interpretation of the factors responsible for setting the present occupational distribution of population and the growth and expansion of economic structure of the region so as to absorb its surplus labour force on the one hand and to provide an ideal occupational distribution of its population on the other, so that the persons willing to participate in the labour force are gainfully engaged to earn their livelihood. It has also ventured

to analyse the causes of the present alarming situation in respect of surplus manpower and lower per capita income of the region and has clearly indicated the salient aspects of its problems so as to offer suggestions for their solution.

A thesis should present a satisfactory literary form suitable for publication. Over half a dozen articles covering some portions of this thesis have already been published in major geographical Journals of the country and have been incorporated in the main body of the thesis at appropriate places after citing suitable references. Necessary foot-notes have been given in the thesis to indicate the specific sources or authorities consulted in the preparation of this work. References have been appended in the end of each chapter of the thesis to indicate the extent of specific and general sources utilised in its preparation. The results arrived at are partly based on extensive fieldwork, partly on published materials and partly on consultation with certain geographers and economists.

A greater part of interpretation and analysis of this work is based on my own investigations and the study of relevant statistical and other materials and on the calculations made there from. The present work aims at a new approach towards the analysis of facts and the examination of role of occupational determinants and so it may advance the bounds of knowledge in many ways. Efforts have also been made to present an exhaustive and meaningful analytical study of all the livelihood classes, i.e. the activities of primary, secondary and tertiary sectors. This is significant in the sense that it deals with the

occupational distribution of population by each livelihood class at the regional as well as the district, tahsil, rural and urban levels. It appears that a planning in the form of an integrated area development approach may solve the problems of this region. A comparison with other states of India and certain countries of the world in respect of occupational distribution of population would clearly indicate a need for its readjustment in this region on modern lines.

The thesis attempts to present an analytical and comprehensive study of all the livelihood classes in rural as well as urban areas of the region. It also puts forth certain suggestions to be incorporated in the frame-work of Rolling Plans to be launched shortly for developing the economic base of the region in which the agriculture and small scale, village and cottage industries would find their due place. This will undoubtedly increase the per capita income of the people and solve the problems of unemployment and underemployment so alarmingly prevalent in this economically backward region. Eastern Uttar Pradesh deserves the care and sympathy of the Government and its people in understanding and tackling its manifold problems of social, political and economic nature with a view to unfolding a bright future in the days to come.

Allahabad
June 16, 1970

Harsh Deo Singh

ACKNOWLEDGEMENTS

Besides the extensive field surveys and spot studies done by the author himself, the present work is based on the source materials of various types. The author owes much to those who have extended their hearty co-operation in supplying the facts and figures or other information directly or indirectly in the preparation of this thesis. He is very much indebted to his revered teacher and supervisor Dr. R.N. Tewari, Reader, Department of Geography, University of Allahabad, who has guided this work at every stage and has taken great pains in going through the entire manuscript.

The author expresses his great sense of gratitude to Dr. S.L. Kayastha, Professor and Head of the Geography Department, Banaras Hindu University, Varanasi who has been kind enough to get the photostat copies of the maps prepared in his department in the shortest possible time. He is also thankful to some of the colleagues in the Department of Geography, University of Allahabad, who readily extended their valuable co-operation, at various stages, in the preparation of the present thesis.

The author is grateful to Dr. R.L. Singh, Ex-Professor and Head of Geography Department, B.H.U., Varanasi; Dr. U.Singh, Head of the Department of Geography, University of Gorakhpur; Dr. G.S. Gosal, Professor and Head of the Department of Geography, Punjab University, Chandigarh; Dr. O.P. Bharadwaj, Professor and Head, Deptt. of Geography, Punjabi University, Patiala; Dr. K.N. Singh, Professor of Geography, Patna University,

Dr. R.L. Dwivedi, Professor and Head, of the Department of Geography, University of Allahabad, Allahabad; Dr. J. Singh, Reader in Geography, Gorakhpur University; Dr. M. Barathakur, Reader in Geography, Gauhati University; and Dr. L.R. Singh, Reader in Geography, University of Allahabad, for their inspiration directly or indirectly in the completion of this work.

He also expresses his sincere thanks to Late Sri P.Thakur, Ex-Principal, Allahabad Degree College, Allahabad, for his inspiration and keen interest in the preparation of this thesis. Sri R.M. Tripathi, the Demonstrator, working in the Department of Geography, Allahabad Degree College, Allahabad, also deserves author's thanks for his valuable help in the drawing of maps, charts and diagrams.

The author is also indebted to a large number of friends, officials and other persons who helped him in various ways and supplied relevant information for the early completion of this work.

Allahabad.

June 16, 1978.

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CHAPTER I

INTRODUCTION

CHAPTER I

INTRODUCTION

1.1. General:

The region selected for the thesis is Eastern Uttar Pradesh which covers fifteen districts (Table I-1) in the eastern part of this state. Although it is not a single administrative unit yet it is indeed a geographically contiguous culturo-economic tract of much significance. It is somewhat irregularly shaped, covering a total area of 80,761 square kms located in the Middle Ganga Plain and lying between the foothills of the Siwaliks and the adjoining Bhabar tract in the north and the eastern off-shoots of Vindhyan uplands in the south.

Eastern Uttar Pradesh has gentle slopes from west to east and is built of the thick mantle of alluvial soils brought down by the Ganga, ^{and} the Ghaghra rivers and their numerous tributaries. The depth of alluvium deposited in the region is over a thousand metres. The area covered is very fertile and is a part of Great Plains of India. It is demographically much saturated and has heavier density of population than other parts of Uttar Pradesh. The region occupies 27.43 percent of the total geographical area of the state, but has to feed 35.37 percent of its total population. It is populated by about 31.25 million people (1971) and has an average density of 387 persons per square km, which is more than this state's average of 300 persons per square km.

Agriculture is the most predominant sector of this region's economy as it engages 84.10 percent of its total working population in the primary sector i.e. in agriculture, livestock, dairying, forestry, fishing, hunting, plantations, orchards and allied activities. However, agriculture itself, which is the back-bone of its economy is in a precarious condition in the region because it has often been subjected to recurrent floods and droughts and the rainfall is also quite erratic here.

The region has inadequate forest wealth and meagre mineral resources and so its infra-structure is also weak. It is the least industrialised region of the country with only 6.50 percent of its working population engaged in the secondary or industrial sector and 9.40 percent in tertiary sector. It has only 17.84 percent of the total urban population of the state which accounts for only 7.06 percent of its total population. Because of its less industrialisation and minimum urbanisation, the region has lesser diversifications of economic activities and so it has underdeveloped industrial and tertiary sectors. The poor agriculture of the region has resulted in its lower per capita income.

The recurrence of floods and famines has necessitated the use of artificial methods of irrigation and flood controls in the region. Although agriculture engages the largest percentage of population, yet it can not provide employment to all. The employment oriented production programmes should, therefore, be linked up with large scale industries and also

with small scale, cottage and village industries so as to bring an element of stability in the economy of the region. Agricultural products are the main raw materials used by the industries here. Sugar industry is the biggest large scale industry of the area which uses sugarcane, an agricultural product. There are other types of large scale industrial units also which are working mainly in the districts of Mirzapur, Varanasi, Ghazipur, Gorakhpur and Allahabad. Mirzapur is a well developed district in respect of industries on account of its mineral and other resources; otherwise only the household enterprises predominate in the most part of the region, which may be classed as handicrafts or traditional trades. In brief the industrial scene is not much encouraging in the region.

In view of the rigid social conditions and the poor economic structure of the region, the analysis of the occupational distribution of population assumes particular significance for this developing region, where rapid increase in population has taken place and is proving deterrent to any planning measures undertaken for its economic and social progress and where large population growth has been retarding the pace of agricultural developments also. Based on the resources of the region and its present occupational distribution of population, a number of measures for the development of its primary, secondary and tertiary sectors have been suggested in the last chapter of this work so as to achieve the desired socio-economic change and adjustment.

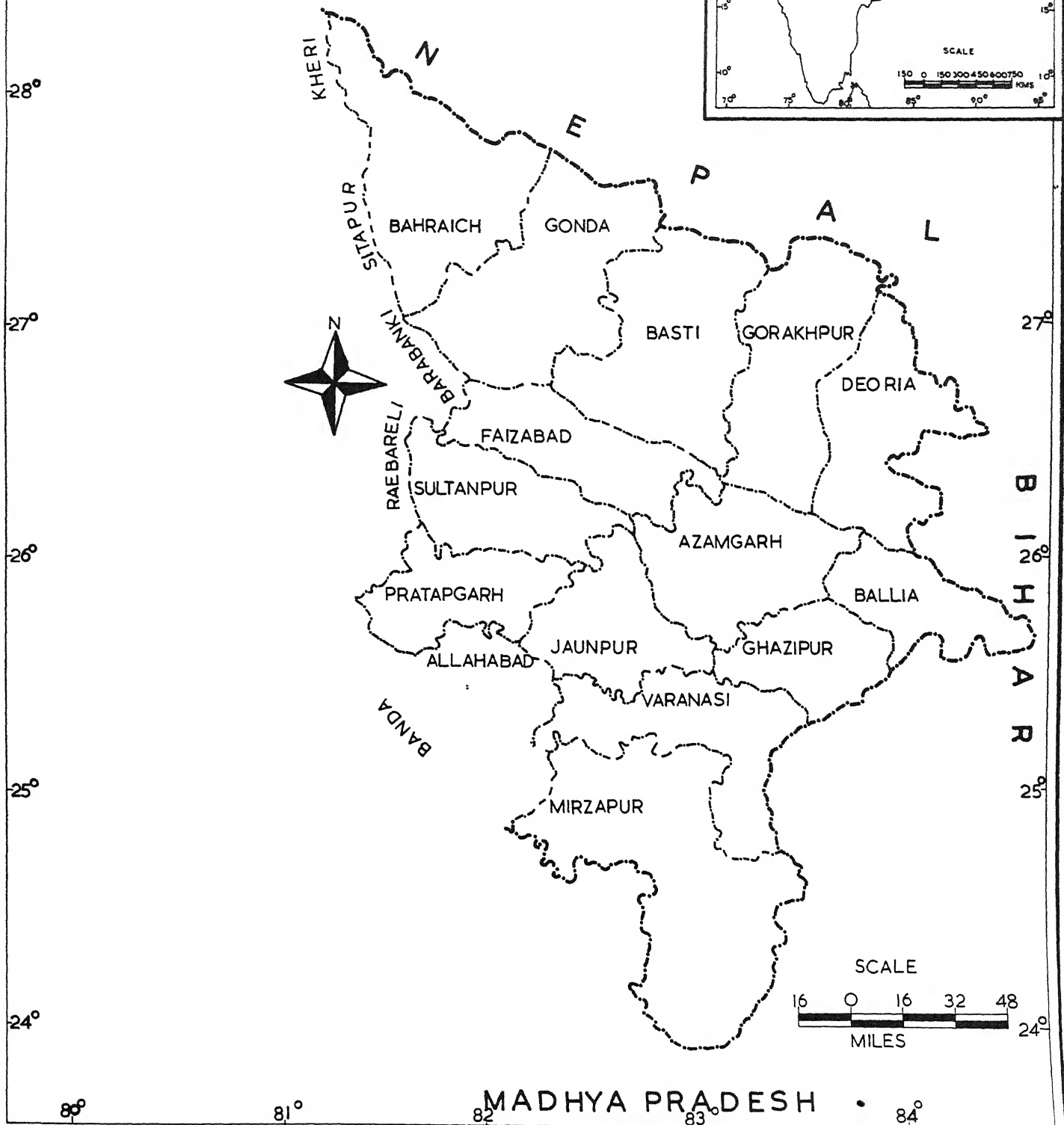
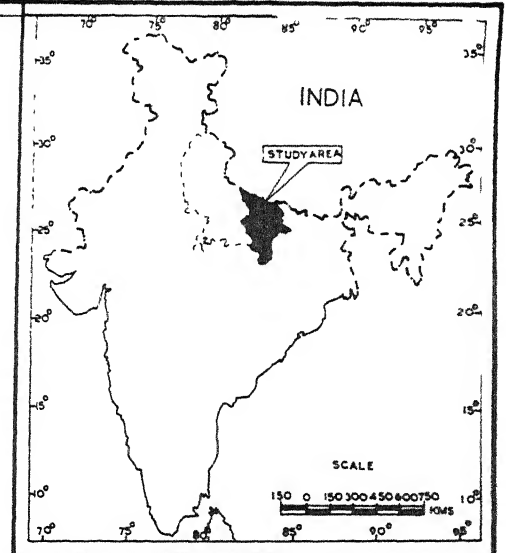
1.2. Spatial Organisation of the Region:

Eastern Uttar Pradesh commanding a total area of 80,761 square kms stretches between $23^{\circ}52'N$ to $28^{\circ}24'N$ latitudes and $81^{\circ}30'E$ to $84^{\circ}39'E$ longitudes and extends over 550 kms from north to south and 375 kms from west to east. This region is not a well demarcated physical unit. Administratively its eastern limit is set by the U.P.-Bihar state boundary and the southern limit by the U.P.-M.P. state boundary running across the southern uplands. The Indo-Nepal international boundary demarcates the northern margin of the region. In the west, it has however, no sharp physical or political boundary and so only the district limits help us to set the boundary on this side. In case of Allahabad district, tahsil boundaries have been taken for the purpose. The region is indeed a geographically contiguous culturo-economic unit of much significance in various ways (Fig.1).

1.3. Administrative Divisions of the Region:

Eastern Uttar Pradesh extends over four Administrative Divisions of Varanasi, Gorakhpur, Faizabad and Allahabad either wholly or partly. It incorporates the Divisions of Varanasi and Gorakhpur entirely but includes the Division of Faizabad except the district of Barabanki and the Division of Allahabad only in respect of the three contiguous tahsils of Allahabad district viz. Soroan, Phulpur and Handia¹. Each Division sometimes called a commissioner^y in under the charge of a Commissioner. The Divisions consist of districts and districts

LOCATION OF EASTERN UTTAR PRADESH



FIGNO 1

are divided into tahsils. A District Magistrate holds the charge of a district and a sub-divisional magistrate is made incharge of a tahsil. Tahsils are further divided into parganas and blocks. Eastern Uttar Pradesh is comprised of fourteen Districts and three tahsils of Allahabad district. In all sixty one tahsils constitute the entire region of Eastern Uttar Pradesh. The following table furnishes the details of Divisions, Districts and Tahsils of the region: Also see Fig.2 .

Table I-1

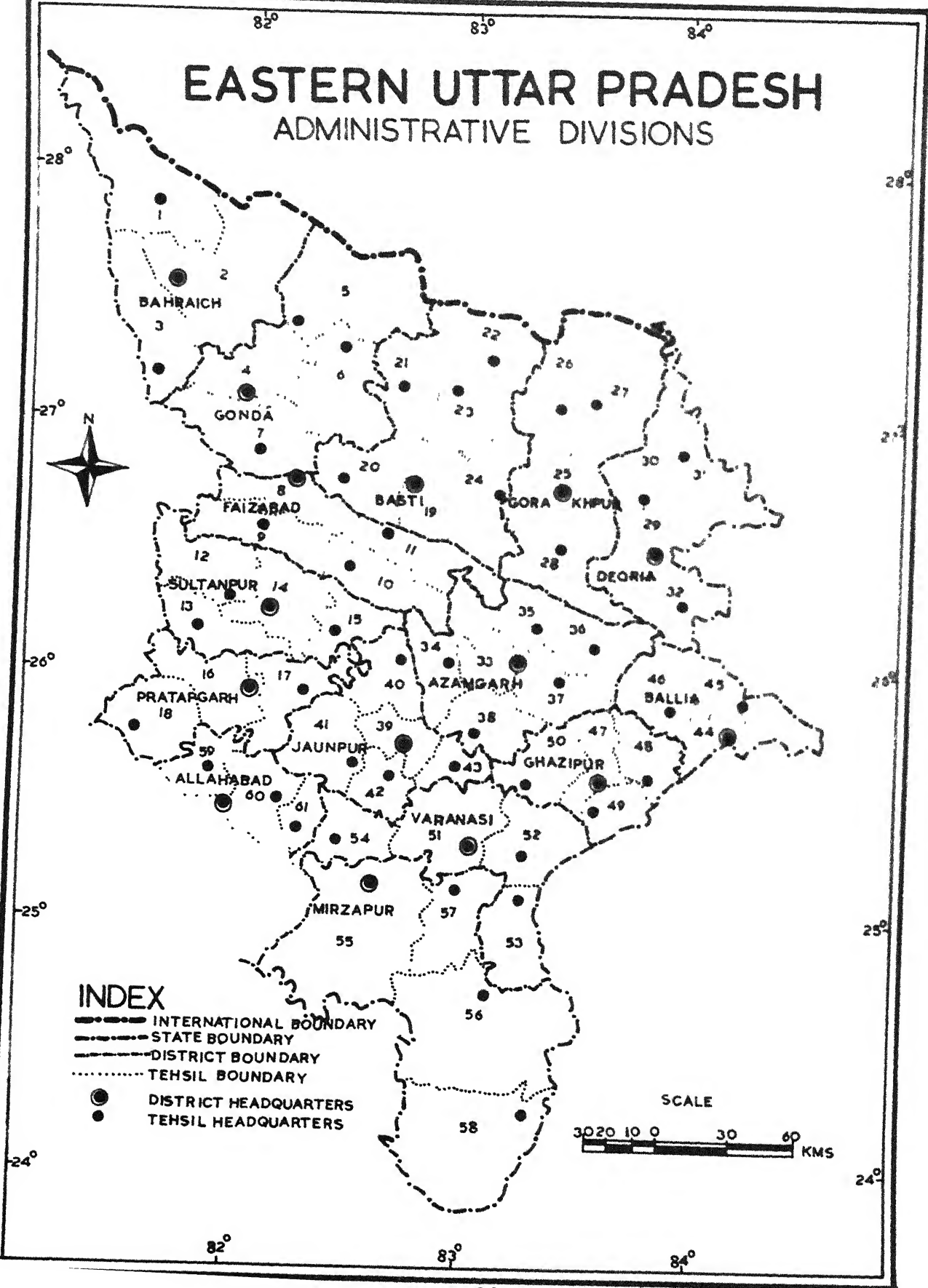
EASTERN UTTAR PRADESH: Administrative Divisions, Districts and Tahsils.

Name of Divisions or Commissioneries	Names of Districts included in the region	Area in sq.kms (1971)	Population (1971)	Names of Tahsils included in the region
1	2	3	4	5
I. Faizabad Division	1. Bahraich	6,871	1,726,972	1. Nanpara 2. Bahraich 3. Kaiserganj
	2. Gonda	7,331	2,302,029	4. Gonda 5. Balrampur 6. Utraula 7. Tarabganj
	3. Faizabad	4,427	1,927,281	8. Faizabad 9. Bikapur 10. Akbarpur 11. Tanda
	4. Sultanpur	4,424	1,642,928	12. Musafirkhans 13. Amethi 14. Sultanpur 15. Kadipur
	5. Pratapgarh	3,730	1,422,707	16. Bela-Pratabgarh 17. Patti 18. Kunda

Contd.

EASTERN UTTAR PRADESH

ADMINISTRATIVE DIVISIONS



1	2	3	4	5
	6. Basti	7,309	2,982,090	19. Basti 20. Harraiya 21. Dommariaganj 22. Naugarh 23. Bansi 24. Khalilabad
II. Gorakhpur Division	7. Gorakhpur	6,316	3,038,177	25. Gorakhpur 26. Pharenda 27. Maharajganj 28. Bangaon
	8. Deoria	5,400	2,812,350	29. Deoria 30. Hata 31. Padrauna 32. Salempur
	9. Azamgarh	5,744	2,857,484	33. Azamgarh 34. Phulpur 35. Sagari 36. Ghosi 37. Mohemmadabad 38. Lalganj
	10. Jaunpur	4,040	2,005,434	39. Jaunpur 40. Shahganj 41. Machhali-shahar 42. Mariahu 43. Kerakat
III. Varanasi Division	11. Ballia	3,183	1,588,935	44. Ballia 45. Bansdih 46. Rasra
	12. Ghazipur	3,381	1,531,654	47. Ghazipur 48. Mohemmadabad 49. Zamania 50. Saidpur
	13. Varanasi	5,091	2,852,459	51. Varanasi 52. Chandauli 53. Chakia 54. Gyanpur
	14. Mirzapur	11,301	1,541,088	55. Mirzapur 56. Robertsganj 57. Chunar 58. Dudhi
IV. Allahabad Division	15. Allahabad (only three Tahsils) <i>the entire district</i>	2,213	1,013,001	59. Soroan 60. Phulpur 61. Handia
Total:	4	15	80,761	31,246,589
				61 Tahsils

Note: The above table is based on the Census of India, 1971, Series 1 (Paper I of 1972 showing Final Population Totals).

And

1.4. Concept Definition of Occupation:

"In modern society, with its characteristic division of labour, specialisation of functions, new methods of exchange and the impact of prevailing ideology, the overwhelming majority of the people engage in a specific and relatively continuous activity in order to earn their livelihood and maintain a definite social status. This activity in the literature of the social sciences is designated as 'occupation'".² We need not go far to believe that the concept of occupation is fundamental to the true society and to perceive that at least for the time being modern society is organised on an occupational basis. Occupation as means of livelihood has its own significance in distinguishing a man from another, providing every individual a feeling of economic independence and at the same time, it unites men of different origins, social and cultural background. It also serves as the link between individuals and society and provides a specific form to the social structure.

"The term 'occupation' itself is indefinite as to both meaning and scope. It has a varying intellectual content and emotional association. In all modern languages, it has a number of synonyms and the range of their meanings indicates as to how much the specific content of this term has shifted through historical epochs".³ Hence, the meaning of 'occupation' has undergone continuous changes from the times immemorial. Therefore, its contents can be fixed definitely only for a short period of time. Even, with this limitation, some complexity is associated with this term, because of the fact that it

must cover the following three sets of different aspects:

(i) the technological: the particular manual or mental operation involved in the mechanical execution of the occupational functions; (ii) the economic: the income yield of an occupation, which serves to provide a livelihood; and (iii) the social: the prestige attached to an individual or group by virtue of his or their occupation. As the importance of these aspects has not been constant through all the historical periods, because the relative significance has always been changing, therefore, neither they had nor they will have identical or similar virtues for a long period of time. Thus the meaning and scope of this term has changed with varying historical conditions. For example the income aspect of the occupation came to the fore only as late as the mediaeval period of town economy. It is now, the most important aspect in the modern society. Before this period, the work for an income was not regarded proper because it was a function of social status rather than of an occupation.

The economic order sets the way through which economic goods and services are distributed and used. The social status or prestige, is of course conditioned by the economic order to a high degree and in its turn reacts upon it also. Thus the great German Sociologist, Max Weber (1946) emphasised that the social order and economic order are not identical. But his concept of class was essentially economic. Besides one's occupation, there are a number of other factors accounting for individual's social status. However, in the modern society

respect, prestige and social status are very much attached to the individual's occupation, although this is not all. Status unlike occupation is a subjective variable and must be sought in the attitudes, the groups hold to one another. Therefore, to equate occupation with social status is apt to be misleading. The grounds of social status also vary greatly from society to society and from one historical period to another within the same society. "Status is the social position that determines for its possession, apart from his personal attributes, a degree of respect, prestige and influence".⁴ There is an intimate historical association between the social class and the type of occupation. But the two should not be identified, on this ground alone for class distinction basically depends not on occupation but on status which although to some extent depends on occupational function.

As illustrated by various official statistical reports and also in accordance with the current popular usage occupation may be defined as "a specific activity with a market value, which an individual continually pursues for the purpose of obtaining a regular and steady flow of income; this activity also indicates to a large extent the social position of the individual. As defined above, the occupation functions as a link between the present economic stage and the social system, because the occupational work must be available for sale and purchase in the open market and not for personal use only. Subjectively occupation is a particular activity pursued by the individual to earn his livelihood. It is a duty imposed on

him from outside as an essential condition of his life in the modern social system. Objectively it refers to the associations of individuals with numerous spheres of economic activities into which the modern society is stratified. Therefore, an occupation with its functional divisions has explicit^{ly} socio-economic implications of a much wider dimension. By pursuing an occupation an individual as an effective member of the society contributes through his work to the national income and the sum total of these persons constitutes the labour force of the nation. Therefore, the individual, his occupation and the society are closely interrelated, rather they are inseparable constituents of the composite social structure.

All the members of the society are not equally effective. Due to this all the individuals do not or cannot exercise their option to pursue an ^{any} occupation. Therefore, the working population must also support the people who live in the society without any occupation. The categories of such persons constituting the group of non-working population (which has no occupation) are composed of mainly the children, the under trainees for specific vocations, the sick, the aged etc. Besides, there are persons in the society having independent means such as rentiers, pensioners, and the like, who share in the income of the society without pursuing any formal occupation. The continually increasing number of unemployed persons in the present society, who are although willing to work, but are forced to live without occupation, complicates the problem further. At the same time, some individuals may

engage themselves in several trades as they pursue subsidiary occupations to supplement their income, although their major incomes come from their main occupations. "Occupation in a modern society is not a rigidly limited sphere of hereditary activity, on the contrary it tends to merge and subdivide and so the change of occupation is ^{0)-?} frequent occurrence".⁵ For example, the term Kumhar is now inferred as Potter and Dhobi as washer man. Generally speaking most castes do also practice agriculture in addition to their traditional occupation. A Kumhar may be an agriculturist in the monsoon months and a trader in grains for a brief period after the harvest.

An analysis of the occupational structure of the industrial activities in the different parts of this country at approximately the same stage of economic development would reflect the fact that it was basically the same in all of them with slight variation from one to another. However, the occupational lines are shifting and the personnel of any particular activity is now fluid. But even this note-worthy shift in a particular activity does not count so much as to distort the set proportions between the larger occupational strata of the society and hence the broad occupational structure has remained fairly stable over along period of time. Despite some marked shiftings in particular activities, ~~is~~ the stability in the larger occupational structure has remained almost intact because of the two forces at work to maintain the balance:

(i) the rational adaptation to the needs of the prevailing economic system in society and (ii) the traditional adherence

to the institution of the past. These forces combine to work in varying proportions under different conditions. The social division of labour also accounts for occupational differentiation. But a great contrast in this nature may be seen in the present stage of economy prevailing in the different parts of this country. Therefore it would be misleading to explain the present occupational stratification in terms of economic rationalism or economic traditionalism alone. The present occupational hierarchy of the society has indeed grown out of the past economic set up, but much of that setup has now been destroyed and perhaps nothing more than an occupational code of ethics remains.

1.5. Social Status and Occupation:

The social respect, prestige or status attached to an individual due to his occupation in the society has changed from one period to another with varying degrees. Even, in the modern society the process of allocating high prestige value to certain occupations, which of course may be of little social utility, reflects the influence of the traditional force of the past. Under such a hierarchy of occupations, the social prestige must have been attached to the individuals in the graded scale according to the social or market value of their occupations. This rough correspondence of prestige to the range of incomes is noticed more clearly in the case of business occupations.

In other fields, particularly in the liberal professions, the social position is generally independent of the lucrative-ness of the occupation pursued by an individual and it is often found in the inverse ratio under certain conditions. Here profession means an occupation which renders specialised and personal service to the society. It therefore, means that a profession is not only an economic activity or a technological fact; rather it is an important constituent of the general social order. "Perhaps the oldest and the earliest distinct occupations have everywhere been the spiritual professions such as those followed by the magicians, soothsayers, prophets, medicinemen, singers etc."⁶. Such a professional work is purely and essentially of personal character. It satisfied human needs in return for some sort of payment. All such professional services differ in nature from the occupations of business motive and they are now outside their scope to a great extent. A professional is an expert in a particular branch of knowledge in order to deal with the specific problems faced by the individuals of the society. Such professionals have although a social position, yet they are not ^{always} economic specialists. They rather exercise a calling in the old sacramental sense of the term.

1.6. Historical evolution of occupation:

From times immemorial man has been pursuing economic activities in one form or the other, because "certain requirements of human life are so universal and so uniform that they

must be fully met and admit no incomplete or intermittent satisfaction".⁷ Material requirements indispensable to human life are, therefore, of paramount importance. In primitive days man's existence depended solely on his exertions. He consumed what he produced and he produced most of what he wanted to consume. There was little distance between the centres of production and those of consumption. In such a world there was no complexity of occupations because the state or any corporate body did not have any hand in it as they did not exist at that time. Man obtained whatever he required from the free gift of the nature. The main occupations of the people were hunting and fishing at that time. Fishing must have been on a large scale in those days and the palaeolithic man must have also been a mighty hunter of animals and collector of fruits and roots. Later on the people must have started domesticating animals and towards the end of the neolithic period agriculture is believed to have become one of the main occupations of the people, who in the beginning depended on wild grains, but later on began to grow crops, fruits and vegetables also. The crafts of the carpenter, stone mason, potter, weaver and dyer etc. were also known in due course.

The modern studies have clearly pointed out that some sort of social classification was always existing in the society even in the past which indicated certain categories of professions or occupations. The initial distinction of Aryan society into two varnas Brahma and Kshatra, later on developed into three Brahma, Ksatra and vis and finally into four Brahma,

Ksatra, Vaish and Sudra. The occupations of the first two varnas were clearly stated as (i) the priesthood; and (ii) the administrative and military duties respectively. But the duties of Vaish and Sudra were not so clearly defined, as they were overlapping to some extent. The village headman was usually a Vaisé and Sudras were generally his servants. "The varna categories do not, however, exhaust the various occupations practised in Vedic India. The Rig Veda, for instance mentions several occupations by name such as chariot-builder, goldsmith, barber, physician, leather worker, potter, merchant and others. The question arises whether these occupations referred to endogamous jatis as we know them today. It is not known how they fitted into the varna frame work".⁸ The four-fold classes were crystallising through the period of Rig Veda. The sanskrit term "Varna" used for them means colour and suggests their origin in the development of old tribal class structure through contact with the people of different complexion and alien culture. "The Aryans were not uninfluenced by the earlier inhabitants. In classical Sanskrit literature the word 'dasa' regularly means a 'slave' or a 'bondman' and in the later hymns of the Rig Veda, it was already acquiring its meaning with its feminine form 'dasi' used in the sense of a 'slave girl' throughout the book".⁹

When the Aryans entered India, there was already a class division in their tribal structure. Even in the earliest hymns we read of Ksatra, indicating the nobility and the vis referring to the ordinary tribesman. Historical records suggest

that a tribal aristocracy was a feature of Indo-European society even before the tribes migrated from their original homes. The culture of the later vedic period was materially much in advance of that of the Rig Veda. Aryan tribes had by now consolidated into little kingdoms, which had not, however, lost their tribal character. The old tribal assemblies were still found but their power was waning rapidly. Here and there, the old tribal organisation succeeded in adapting themselves to the changed conditions and so ganas or tribal republics survived for many centuries.

The Aryans followed a mixed pastoral and agricultural economy in which cattle played a predominant part. Cattles were infact a sort of currency in those days and values were reckoned in heads of cattle. Cow had more economic importance. "Aryans did not have much advanced economic system as "they relied for their unit of value and means of barter on the unwieldy cow. The 'nisk', a term later used for a gold coin, is also mentioned as a sort of currency but probably in the form of a gold ornament of some kind".¹⁰ However, the Aryan culture had nearly all the equipments of a civilisation of ancient type where the Rig Veda speaks only of gold, copper or bronze, the later vedic texts also mention tin; leḍ, silver and iron. The importance of iron was due to the fact that it was harder and cheaper than bronze. specialised trades and crafts had also appeared in the later vedic period.

Ward (1936) has pointed out how social classes similar to castes in India were in existence in European society. "The

four so-called 'Estates' of European History so clearly recognised in the eighteenth century correspond so well to the four great castes of India".¹¹ Thus the First Estate consisting of the clergy; the second Estate consisting of the warriors or the ruling class forming the nobility; the Third Estate consisting of the merchants and the businessmen and the Fourth Estate consisting of the commons of England or the bourgeoisie of France including the labourers and artisans, correspond well to the Brahmana, Kshatriya, Vaishya and Sudra Varnas of India. In ward's view castes exist in all countries which have undergone the struggles between different races through their history.

A.W. Small also opines that "in every society, there exists the tendency to create social classes and further their stratification into castes especially into three rigid classes viz. the privileged, the middle class and the lower unprivileged class without property rights and influence".¹² The privileged classes make all efforts to perpetuate this kind of social stratification in order to retain the privilege and thus the system of social differentiation once started continues to persist for a long time and is even intensified by the passage of time.

It is evident from old records that like other manifestations of society, the occupation has also been shaped by authority and primarily by religious authority through the greater portion of man's history. The evolution of capitalism provided a new dimension by attaching new spiritual values to the economic activity and it was a secular attempt for monetary

returns with a definite meaning and dignity. A tendency towards a corporate organisation reflects a great distinct influence of the past which in turn resulted in the recognition of occupation as a public entity with special legal rights, fixed power, and a well-defined internal working set up. Haney defines organisation as 'a harmonious adjustment of specialised parts for the accomplishment of some common purpose or purposes'. In simple terms an organisation is a systematic arrangement of parts for a defined purpose. Therefore, two contradictory principles of social organisation appear to have developed i.e. the corporate and the occupational. The first is based on the closed, static, conservative type of community, the extreme of which is caste system and the other is of a free dynamic progressive type in which the purest realisation of the other extreme lies in the fact that every individual pursues an occupation of his own choice according to his personal capacity talent and qualifications.

However, the structure of society was chiefly corporate rather than occupational before the evolution of the modern society, which certainly lies between the two extremes and reflects the movement from the closed to the free and vice-versa. In the modern society also while doctors, lawyers, scholars, militarymen and the members of other intellectual and liberal professions develop a group consciousness and internal organisation and attain a corporate existence; the proletarian organisations are in the process of change from mere occupational bodies into corporate associations. "This process would

have much accelerated, if the ideology of class consciousness and class struggle which denies the validity of the corporate and occupational concepts and at the same time aims at transformation of the proletariat in the only corporative body in society, had not hindered the development of a clear-cut corporate ideology and a code of corporate ethics".¹³ It is this duality which submits an unfailing explanation for many conflicts to the principles of labour organisation such as that between craft and industrial unionism.

The occupation itself forms an important constituent of the social history, and its present shape must have emerged out of more or less a definite but ill-defined evolutionary process. An attempt in this direction certainly involves a study of changes in the internal organisation of the industrial units and in their inter-relations, which furnishes clues to the occupational history through the systematic exposition of a general outline of the succession of occupational development industry in which processing and fabricating operations are dynamic factors. Industry and commerce are two component parts which together account for the economic development and increase the complexity of occupations. Thus the occupational development in industry is very much correlated with economic development of society, which in turn determines the stage of civilisation. Therefore, it is a vast and complex activity which embraces all the functions involved in processing and fabricating operations and other services connected with the industry and commerce which arise because of the facts of

(i) the diversity of natural resources and their geographical distribution; (ii) the differences of human wants; (iii) the division of labour; and (iv) the need for satisfaction of human wants.

In ancient and mediaeval periods where people concentrated in one place; villages, towns and cities sprang up; and the advantages of living in a society and division of labour were brought into fore-front. As the development continued, times changed and with advancing civilisation and the growth of city life, it became more difficult to satisfy even the simplest needs. Moreover, the needs also became more elaborate followed by a number of complex economic functions pursued by individuals. Naturally man began to specialise in the production for which he had the strongest aptitude and in which he had the best advantages. So the division of labour resulted and the exchange of goods developed. The basis of this exchange was surplus production due to skilled labour involved in the pursuit of an occupation. The Robinson Crusoe economy changed into the Barter economy. In our country the Barter system existed with Aryan society in Vedic period and is still in vogue predominately in the rural areas. Because of the Barter economy, specialisation in production took place and subsequently craftsmanship developed considerably. So the occupations became hereditary. There was no inter-mediary at that time. With the passage of time money economy was introduced, civilisation developed and conditions became far more complicated.

From the very beginning three principal types of industry, each predominant throughout a prolonged but ill-defined epoch, have existed in various parts of the region and the country. "The first is the handicraft system closely associated with craft guilds and prevailing almost universally untill the 15th century. The second is the domestic type, which, introducing industrial capitalism, was prevalent in the seventeenth and eighteenth centuries. The third is factory type, which first arising on a considerable scale in England during the second half of the 18th century gained ascendancy in France with second quarter and in Germany in the third quarter of the 19th century and then spread all over the world".¹⁴ Therefore, the processing and fabricating operations underwent tremendous changes with the stages of economic development and the consequent growth of civilisation which resulted in the multiplicity of occupations and the division of labour.

1.7. Division of Labour:

Proper division of labour occurred at first not within the tribe but as between the tribes. In tribal structure of the Aryan society during the Vedic period, the division of labour was along lines which were longitudinal or horizontal rather than transverse or vertical. Crafts were essentially separate one from another and in each craft, the individual group of workers within the same economic unit carried the work of manufacture through all the required stages from the extraction and collection of raw materials to the placing of the

product in the market. The basic unit of the Aryan society had been the family. The workers engaged were mostly from the same family or at most from the same tribe. There was an exceptional stability, not only in the supply of labour and of raw materials but also of the conditions of the sale of the products. There was regular inter-tribal exchange of goods, sometimes with a complex organisation. However, there was a clearly marked separation of functions between the sexes.

Intra-communal occupational differentiation appears with the decay of the tribal society during the later vedic period. The mixing of different ethnic strains and the introduction of slave labour utilising the strange love and skill of the aliens, created necessary conditions for specialisation of skills and growth of internal exchange and the separation of occupations as economic entities. This tendency was further developed during the ancient and mediaeval periods when several neighbouring tribes or communities came closer under a political authority which provided a peaceful environment for the development of skill according to their natural aptitude and so they maintained a high standard of craftsmanship and at the same time specialisation in crafts took place on a large scale and consequently a clear-cut division of labour followed the economic and industrial development.

However, the social division although started at the earliest, took a concrete shape with the appearance of "so called wage work", reaching the stage in which the worker owned

the tools and customers provided the raw materials. As a man with a trade, ready to serve any one for compensation, the craftsman became an individual of public character. Thus he assumed the performance of certain public functions and may, therefore, be said to have filled a public office. The blacksmiths, goldsmiths and the carpenters of villages serve as examples. Therefore, the craftsman of the present day in our villages is like a public official whereas the craftsman of wage-work period was a communal official. Their occupations since long had been recognised under social category and had always been more than a special skill. Barter economy being replaced by money economy which made a headway later on; the practice of working up customer's material was being replaced by the better known form of handicraft organisation in which the workers owned not only the tools but also the raw materials and in some cases also the workshop. The processes of manufactures were few and simple and the machinery used was crude and in-expensive. Articles of all kinds were literally handmade. The term handicraft denotes 'a form of industry not only based on hand labour but devoid of capitalistic element also'. The family or a family reinforced by a very small number of helpers was the unit of industrial organisation for the handicrafts.

But later on, the Crafts organised into Guilds and public corporations, which furthered the economic interests of their members and at the same time they also assumed responsibility for providing needed goods of assured quality at moderate prices to the customers. The most note-worthy feature

of this system was the organisation of 'the work-people'. A craft guild was an association of artisans of the same occupation. The weavers might constitute one; the candlemakers a second; the goldsmiths a third, the blacksmiths a fourth and so on. A monopoly was aimed at by them. The craft guilds ensured a fair living to the worker and the master craftsman and also a good standard of craftsmanship. Mutual help in sickness and poverty was an essential part of their organisation. It also afforded ample opportunities for the technical training of workers. There were three defined grades of workmen viz. the masters, the journeymen and the apprentices. Later on the Merchant Guilds, an association of persons engaged in the trade of handicraft products, also came into being.

The Guild system served a varied and highly useful purpose as the technological aspect of occupation and made an ever higher development of skills than had hitherto been the rule, although they became less individualised. In other words all members of an occupation conformed roughly to a certain standard of performance. Regarding the economic aspect, there was a vertical split in the industrial production. The manufacturing process separated into phases being carried on under one roof but into independent industrial branches. Thus the mutual exchange between specialised economies, which now produced for the outside rather than for direct satisfaction of their own needs, was necessitated and at the same time this aimed at the maintenance of traditional standards of living rather than large profit. Socially, the Guild system gave

birth to a new type of property i.e. industrial capital and created a new category of property-class which aspired for its social and political importance. The exercise of an occupation was not a matter of individual choice now but a privilege of the hereditary Guild membership. An occupation thus became a function of social status. The occupational practices now began to be regulated by rules and regulations framed by Guild councils.

The growth of capitalism and the increasing application of capital to industry caused the geographical changes in the distribution of industry and also contributed to the disintegration of guild society. The growth of a centralised state organisation, in this field, the unification of large economic areas and the radical changes in the techniques of production and distribution resulted in a re-grouping of occupations and eventually in the creation of new occupational order, Where the division of labour in handicraft system multiplied and it created independent economic units. The supply of labour under contract system gave birth to new forms of industrial organisation and it made a permanent class of wage workers. The industrial society was now divided into two antagonistic classes of the capitalist entrepreneurs and the proletariat; and the social functions of the old occupational corporations passed on to the state. Some of these changes became manifest under the contract system which was a natural outgrowth of the splitting up of production among so many crafts so that they could no longer depend upon local markets. "A wholesale

merchant thus came in between the producer and his market; the production lost thereby his economic independence and the distribution process, hitherto a simple matter of personal contact between producer and consumer, was now turned into a series of functionally related services with separate business organisations".¹⁵ The new type of employer was now primarily a merchant. He was not a craftsman. He gave his attention to purchases and sales on considerable scale and neither worked with his own hand nor spent time in the supervision of manufacture; so the profit motive took upper hand as a necessary condition for the fulfilment of contracts.

Commercialisation and later on mechanisation of industry, introduced a phase of domestic system which became the fore-runner of the modern factory system. Production was now carried on by a controlling owner who hired employees to operate machines. The emergence of the entrepreneurs and the merchants on the scene gave rise to capitalism which underbid relentlessly the products of the artisans. A social consequence of this change was that the artisans lost their independence and also ownership and control of the tools and materials and could live only by finding employment as hired workers who used the equipments owned privately by the entrepreneurs. Therefore, we find a marked shift from production for use to production for sale, and then to production for sale at profit leading to accumulation of private wealth. This process gave birth to the modern industrial capitalism.

As the industrial revolution was followed by greater commercial activity, so the factory succeeded in suppressing the domestic units of industry, putting out the contract system. Unlike England and other European countries, the industrial revolution in India was the result of the forces generated abroad. The machine made goods with which the Indian artisans had to compete were turned out not in India but in British factories. The disengaged industrial population had, therefore, to fall back on land and thus the rural character of the country was accentuated. In the factory, division of labour, based on productive operations into more or less simple manipulative acts entrusted to separate workers, skilled work was differentiated from unskilled and heavy from light. The factory system created permanent categories of skilled, semi-skilled and unskilled labour, while the handicraft system had gradations of masters, journeymen and apprentices. Factory workers never mastered all the stages of production even in a highly specialised branch of industry. They were aided and directed by entirely a new class of higher industrial officials, specialised in technical and business training. The capitalist entrepreneur too, concerned with commercial aspects solely under this system, now assumed a general technical supervision of productive process also.

1.8. Impersonal interest and occupation:

With mechanisation, the Machine became the master and workers its servant. All the craftsmanship was of no avail now.

The use of machinery further encouraged the division of labour or specialisation. Every worker became a specialist in a part of the product only. He even now goes to work irrespective of the fact whether he likes it or not, just to earn his wages. He does not, however, want money for its own sake but for what it will buy. He gets it as much as possible to satisfy his wants. If he could get all these without work, he would not go to work. This is in fact true of everybody who contributes towards economic activity. Because of such a condition prevailing in society, the true proletariat began to come up. The free labour now owned neither the tools, nor the raw materials nor the workshops; he had now to submit to a discipline imposed by a technical process which he did not even understand.

He accepted the job which he did not like and worked under unpleasant conditions. He accepted the wages which were not adequate for his actual or subjective needs. The employer might care more for his machines which were owned by him rather than for the workers who might be treated as expendable. The worker had no interest in the success of the industry or in the quality or price of the product. Rather he became a hand without face and an item in the inventory of industrial equipments. The factory workers' labour power was purchased like a commodity. Therefore, this new industrial system and the occupational differentiation brought forth a change in relationship between the occupation as a social grouping and the ~~competitive-spirit-of-the-new-system~~, society as a whole.

Under the progressive technique and the competitive spirit of the new system, corporative organisations of handicraft era disintegrated and lost their traditional and monopolistic importance. Their schemes of rules and regulations were now replaced by the enactments passed first by the territorial state and then by the National Government and later on by the new capitalist bourgeoisie. These enactments still contained the traditional scheme of corporative organisation to certain extent but, however, they assured freedom of occupational choice. The occupation now ceased to be an office, rather it became a duty recognised and enforced by authority. It was now a social function, assumed by each individual at his own personal inclination and economic necessity and he pursued it without much authoritarian interference.

Emancipation of occupational life released the energies of the people, motivating them to a more vigorous, although not always a socially efficient, pursuit of economic occupation. This emancipation was not a true freedom of occupations because they might become available only to all those whose inclinations and natural gifts would fit them for such a work. Actually a genuine freedom of occupational choice would involve the facts of: (i) the availability of opportunities; (ii) the unlimited scope of discretion in choosing among them; and (iii) a complete harmony between the individual and his job. But these facts obviously do not conform to the conditions prevailing in the modern society.

Although the formal emancipation of occupation dispensed with many tangible obstacles in the attainment of the ideal, yet a great many factors still operate to prevent a perfect correlation between the individual's capacity and his occupational utilisation. The improvements in transport, communication and organisation of labour market have minimised the impact of geographical factors and consequently have favoured the occupational mobility to a certain extent. But still there are a number of factors operating against this trend which might be due to (i) the social associations which bind the worker to his older residences; (ii) the social stratification prevailing in the society; (iii) the uneven physical capacities and mental faculties of workers and unequal opportunities for the development and cultivation of their such natural gifts; (iv) the costly and long drawnout process of vocational training; and (v) the immigration barriers etc.

Despite the above obstacles, there is now a considerable degree of occupational mobility. But as most of the occupations need some special training, a change of occupation necessarily entails individual sacrifice and social waste. The workers of a particular occupation develop a sort of mentality of exclusiveness and regard their job as a matter of privilege to be passed on to the new comers only under certain specified conditions. These conditions might constitute the process of a long apprenticeship in the specialised skill of trade, a special social background in some liberal professions or governmental or public undertaking services or simply a contact

with the right clique for a 'pull'. The pre-requisites mentioned above are now very invaluable in securing an appointment to the higher paid jobs in the industrially oriented modern society. Social and regional differences also actively disturb the normal occupational distribution to a great extent. A particular ethnic group likes certain jobs, while, others dislike them, sometimes on economically rational grounds, but occasionally because of certain prejudices only. In modern society women have also freedom to pursue occupations. The formal limitation upon their freedom of occupational choice has now little importance. The women's work which lost its importance with the decline in the economic significance of household industry, has regained it since the emergence of industrial capitalism, because of ample opportunities for employment available to them outside the home. However, they face competition from men on several grounds.

As in good old days, every man is at work today. The agriculturist is busy in the fields sowing the seed and reaping the harvest. The factory worker is controlling the machine, feeding them with raw materials which are converted into finished goods. The miner is extracting mineral deposits from beneath the earth's surface. The office assistant is maintaining records in the office. The doctor is attending patients in his consulting room. The lawyer is pleading the case in the courtroom. The teacher is teaching his subject in the classroom. The transport workers are carrying persons and goods from one place to another. So on and so forth. The rationale of

economic activity is to satisfy human needs.

The economic activity is generally grouped into four divisions i.e. the extractive, the constructive or manufacturing, the commercial and the direct services. The extractive activity is concerned with the raising of crops from the soil or obtaining various forms of wealth from beneath the surface of the earth. The manufacturing activity consists of the working up of raw materials into finished products, while the commercial or distributive group deals with the transfer of the finished goods from the centres of manufactures to the consumers and the raw materials from the producers to the manufacturers. This group includes a good variety of persons engaged in the distribution and collection work such as transport agencies, banks, insurance companies, wholesalers, retailers etc. The last group of persons engaged in direct services are in fact increasing the efficiency and saving the time of the more directly productive workers, although they are not engaged themselves in the production of material commodities. These services include those of protective types also such as done by soldiers, policemen, sailors etc. The persons engaged in such professions also form the part and parcel of this group.

1.9. Significance of Present Study:

The significance of occupational distribution of population of a region lies in the fact that it clearly reveals the economic characteristics of the people living there. The

occupational structure refers to the varieties, nature and distribution of occupations and the population and its categories engaged in them. "There is a close relationship between the development of an economy on the one hand and the occupational structure on the other and economic progress is generally associated with certain distinct, necessary and predictable changes in occupational structure".¹⁶ Therefore, any change in the occupational structure may be an indication of economic growth. In other words, the growth and prosperity of a region are to a large extent dependent on (i) the size of its working population; (ii) the types of its occupations; (iii) the composition and structure of its working population; and (iv) the trend of urbanisation.

The rise of working population and its increasing proportion to the total population of a region are important factors of its economic growth. They would lead to more production, if the entire labour force is gainfully engaged in economic activities. More productivity would mean more per capita income. The rising proportion of working population is bound to lower the Dependency Ratio i.e. ratio of the burden of unproductive consumers on the working population.

The engagement of the labour force in varied categories of occupations has its own significance, because all the economic activities are not equally gainful in respect of wages and rewards which differ widely from one occupation to another; from one place to another and from time to time and so the

labour force has the wide range of choice to choose more gainful occupations. The per capita income is also dependent on the nature and scope of particular occupation. For example, the per capita income of an agricultural labourer can not be equal to that of an industrial worker and the same can not be equal to its managerial executive in the same factory.

The composition of labour force by age and sex indicates indirectly the economic conditions of the people of a region. Generally the persons of non-effective age groups are not gainfully employed and therefore their contributions to the productivity of the region are lower than those of the persons of effective age groups in the same occupation. Similarly the female workers do not contribute as much as the male workers in the same or different occupations of a region.

The composition of the labour force by rural and urban classes is also of much significance because usually the rural functions are not as much remunerative as the urban functions which differ widely from the agricultural activities. The rural functions are mostly traditional whereas the urban functions are more diversified and so more gainful.

The inter-occupational comparison of two different periods and two different areas would show that particular occupations attract more people than others because of their more remunerative attractions. The choice of occupations is determined by socio-economic values also. The occupational distribution of population of a region is dependent mainly on

its physical, social, cultural, economic and demographic conditions.

Eastern Uttar Pradesh is considered as demographically saturated region, wherein over-population, poverty, mass unemployment, underemployment, illiteracy etc. are widespread. They are now attracting the attention of our planners, economists, legislators, administrators and others for solution due to rapid growth of population in recent years. The poverty and backwardness of Eastern Uttar Pradesh are well known all over the country and they are so pressing that a large number of people have emigrated to other parts of this state and also to other states of India, particularly to Maharashtra, Gujarat, West Bengal, Assam etc.

The study of occupational distribution of population is very essential for understanding the economy of Eastern Uttar Pradesh. The whole economy needs its gearing through implementation of development plans to transform the age-old traditional caste structured rural society of the region into an industrialised one. The plans for economic development launched so far in the region have made no significant change in its occupational structure, although tendencies are afoot towards some fruitful results.

In view of the culturo-economic conditions prevailing in the region, it is quite clear that the present economic structure of Eastern Uttar Pradesh can not provide sufficient number of jobs to reduce the backlog of unemployment and as to

engage those who will enter into the labour force in the years to come. The temporal and areal variations of occupational distribution of population are indicative of the physical, socio-economic and demographic conditions of the region. There is need for more progressive plans for economic development. This may be initiated under the frame work of Rolling Plans which envisage employment oriented production programmes in different sectors of economy. Any such study for the region must have special significance.

1.10. A Critique:

Although a systematic population geography is a new branch of geography, yet considerable work has now been done in this field in India and abroad. However, they mostly relate to the distribution, density and growth of population and have neglected other characteristics. Scholars like G.T. Trewartha¹⁷ have pleaded for the development of population geography as a separate branch of systematic geography. Trewartha was the first person who started a graduate course in population geography in 1954 and also initiated research students in this field. Dr. G.S. Gosal took up the lead in India in this respect.¹⁸

Although a number of articles on population dealing mainly with its distribution, density and growth have appeared in Indian Journals, yet there has been a lack of geographic studies on other aspects of population, such as sex ratio, literacy, religious composition, occupational structure, urbanisation etc. Some articles have been published on these aspects

also but a very few have appeared on the occupational structure of population in the country.

The first article¹⁹ on the occupational structure of India's rural population was published in 1958. It was based on what emerged on a map, where the proportion of non-agricultural population to the total population was plotted. It focussed our attention on the spatial distribution and regional variation in the occupational structure of rural population. Mitra²⁰ in his article published in 1967 analysed the changes in the occupational structure of India's population during 1951-61 and noted some significant trends of shift from agricultural and non-agricultural activities.

The contribution of Mehta²¹ (1967) relates to the regional pattern of rural female working force in India. Chandra²² (1967) conducted a study on Punjab's rural female working force. The occupational structure of rural population of Punjab had been studied by G.S. Gosal and Krishna²³ (1965). Km Sheila Roy²⁴ (1972) in her thesis examined temporal trends of changing occupational pattern of population in Uttar Pradesh during the period 1901-71.

The present volume attempts to present a critical analysis of the occupational distribution of population in Eastern Uttar Pradesh based on geographical background. In view of the socio-economic and culturo-demographic trends of the region, some meaningful suggestions have been made to be undertaken in the years to come for providing suitable employment

opportunities to all males and females willing to offer their services to the labour force. The study of occupational distribution of population on a regional basis is, therefore, more meaningful and significant.

Meagre work has been done in the country on a regional pattern in respect of occupational structure of population and hence it must deserve the attention of scholars in geography. This aspect of population geography is so wide and meaningful that one may go on working in this field and yet he will always find scope for further researches.

1.11. Methods of Investigation and Approach:

The present study has been mainly dependent on the Census Reports of Uttar Pradesh and on the Census Handbooks of the Districts comprised in the region. Other relevant literature and statistical analyses have also been thoroughly consulted. The study has further been supplemented by the suitable references, maps, charts, diagrams etc. at appropriate places to clarify the complexities of spatio-temporal and socio-economic trends of the occupational distribution of population in Eastern Uttar Pradesh and their variations both in rural as well as urban areas.

Both qualitative assessments and quantitative measurements of the occupational distribution of population of this region have been attempted as far as possible because they are necessary components of research strategy. Qualitative evaluations provide purpose and direction to the study and

quantification gives it necessary accuracy, precision and depth. The qualitative measurements have made it possible to understand the magnitude of variations in the occupational distribution of population of the region so as to arrive at qualitative judgments of a higher order.

Field studies undertaken have clarified many aspects and have helped a lot in the analysis, interpretation and correlation of the variables. The conclusions have been worked out by taking into consideration the economic developments vis-a-vis working population of the region and their comparisons in relation to other states of India as well as some other countries of the world. Suggestions have been put forth for the adoption of employment oriented production programmes for the region within the frame work of plans of economic development based on the need of the people keeping in view the resources of the area.

The approach of this study is basically functional as it tries to present the existing occupational distribution of population of the region as having been evolved out of its adjustments to the geographic background and the socio-economic and culturo-demographic conditions of the people residing in Eastern Uttar Pradesh. Field investigations have played an important role in the identification, analysis and interpretation of relevant data.

It is believed, the present work will serve its purpose and prove as useful base for further studies of similar nature. Let the high hopes of this study be translated into action as far as possible.

REFERENCES

1. Singh, R.L. (Ed.): "India: Regional Studies" (Calcutta: published by Indian National Committee for Geography, 1968, p. 56).
2. Encyclopaedia of Social Sciences: Volume XI-XII, Ed. 1965, p.424.
3. Ibid., p.424.
4. Maciver, R.M. and Page, C.H. "Society" Ed. 1959 'Social status and occupation', p.350.
5. Encyclopaedia^{of} social sciences: Volume XI-XII, Ed. 1965, p.425.
6. Encyclopaedia^{of} social sciences: Volume XI-XII, Ed. 1965, p.426.
7. Brunhes, Jean. "Human Geography", Ed. 1952, p.30.
8. The Gazetteer of India (Indian Union) volume I (country and people chapter IX - social structure-caste), pp.502-3.
9. Basham, A.L. "The wonder that was India", Ed. 1967, p.35.
10. Ibid., p.38.
11. Ward, L.F. "Social classes and sociological theory" in American Journal of Sociology, Volume XIII, pp. 617-27, Ed. 1936.
12. Small, A.W. General Sociology (1920), pp. 275-77.
13. Encyclopaedia^{of} social sciences: Volume XI-XII, Ed. 1965, p. 426.
14. Shukla, M.C. "Business organisation and management", Ed. 1972, chapter II "Evolution of commerce and Industry" "Evolution of Industry", p.19.
15. Encyclopaedia^{of} social sciences: Volume XI-XII, Ed. 1965, p. 427.
16. Colin Clark: "The conditions of Economic Progress (1940)", p. 182.
17. Trewartha, G.T. "A case for Population Geography"; Annals of the Association of American Geographers, 1953, pp. 1-97.

18. Gosal, G.S. "A Geographical Analysis of India's Population", Ph.D. Thesis (unpublished), Wisconsin University, 1956.
19. Gosal, G.S. "Occupational structure of India's Rural Population", National Geographic Journal of India, 1958, No.4.
20. Mitra, Ashok "Relationship between patterns of shift from Agriculture to Non-agriculture, 1951-61 and the Levels of Development", Asish Bose (Ed.): Patterns of population changes in India, Allied Publications, Bombay, 1967.
21. Mehta, Swaranjit "India's Rural Female Working Force and its occupational structure 1961: A Geographical Analysis", Indian Geographer, 1967, pp. 49-68.
22. Chandra, R.C. "Female Working Force of Rural Punjab 1961", Man Power Journal, 1967, Vol.2, pp. 47-62.
23. Gosal, G.S. and Krishna, Gopal "Occupational structure of Punjab's Rural Population, 1961". Indian Geographic Journal, 1965, pp. 40-45.
24. Roy, Sheila "Changing Occupational Pattern of Population in Uttar Pradesh". D. Phil Thesis (unpublished), University of Allahabad, 1972.

CHAPTER II

THE PHYSICAL SETTING

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2.1. Location

Eastern Uttar Pradesh occupies the eastern portion of the state of Uttar Pradesh and includes the three Administrative Divisions of Varanasi, Gorakhpur and Faizabad (excluding Barabanki District) together with a part of Allahabad District (Soroan, Phulpur and Handia Tahsils only) of Allahabad Division. It stretches from $23^{\circ}52'N$ to $28^{\circ}24'N$ latitudes and from $81^{\circ}30'E$ to $84^{\circ}39'E$ longitudes, covering a geographical area of nearly $80,761 \text{ km}^2$ lying mainly in the Middle Ganga Plain and extending for about 550 kms from north to south and about 375 kms from west to east. The region occupies 27.43 percent of the total geographical area of this state but accounts for 35.37 percent of its total population. The Districtwise details of area and population have already been mentioned in the Chapter 1 of this thesis.

Eastern Uttar Pradesh is indeed a culturo-economic unit of great significance. It has an irregular shape and is bordered on the north by Nepal, on the east by the State of Bihar, and on the south by the State of Madhya Pradesh. On the west it merges with the central part of Uttar Pradesh.

2.2. Structural Growth

Geologically, the Eastern Uttar Pradesh is divided into two broad regions: (i) The Ganga-Ghaghra Plain and

(ii) The Southern Uplands. The Ganga-Ghaghra Plain with its almost featureless monotony forms a part of the Great Plain of India, representing a geological continuum of the western part of the same plain. This plain is built up by the sediments of the Himalaya's brought down by numerous rivers e.g. Ganga, Yamuna, Ghaghra etc. and their tributaries. This plain was subjected in the past to many transformations before it reached the present stage. Indeed "There have been numerous changes in the chief drainage lines of North India since later tertiary times; changes which infact have produced a complete reversal of the directions of flow of the chief rivers of North India".¹

After the rise of (Sir Hind) Plateau, the big river known as 'Indo-Brahma' or 'Siwalik' was dismembered and turned into those important drainage systems. The easterly system (middle portion of Indo-Brahma) was known as Ganga and it sought its flow back to the Bay of Bengal which at that time extended far north than its present position. In due course this river covered almost the entire region of Eastern Uttar Pradesh with a thick mantle of sediments brought down by its mighty flow and numerous tributaries. Like other parts, this portion of the Great Plain is also very young geologically. The westerly system sought its flow to the Arabian sea which extended in the past over the entire portion of Rajasthan. From this originated the Indus system and the famous Saraswati river of the old Hindu scriptures, from which later on was born Yamuna which joined the Ganga system near Prayag. The original flow of the Indo-Brahma in the north east maintained its course and was

known as Brahmaputra system.

2.3. Geological Structure

(1) The Ganga-Ghaghra Plain

Geologists believe that there was a huge trough between the Himalayas in the north and older dissected plateau and its hills in the south. Later on it was filled up with alluvial sediments brought down by the rivers coming from Himalayas and formed almost a level plain with its general slope from north-west to south-east, known as the Ganga plain which extended to the south up to the District of Mirzapur and there it reached the abrupt scarp of the flat topped low hills into which the Vindhyan ranges had descended themselves in this region.

The nature of this trough and the thickness of the alluvial deposits in this plain are not known definitely, but undoubtedly this plain is vast and it varies in thickness from one part to the other. Because of the immense thickness of the sediments filling up this plain, the exact shape of the trough below this can not be ascertained. However, the Aero-magnetic survey of the Ganga Valley (1956) has thrown new light on its shape, form and depth and it does not support the possibilities of frontal plains formed by either a fore-deep or a deep rift valley as postulated by Oldham, Suess, Burrard and others. It has further disclosed that average alluvial thickness of the plain may not exceed 1,300 to 1,400 metres with varying depth from one part to the other. The depth of alluvial deposits thins out near the Vindhyan Uplands, in the

south but increases much in the north while approaching the Himalayas. It is believed that the sector, south of Ghaghra and East of Faizabad-Allahabad rail line has an average thickness of 1,500 to 3,000 metres. "It is indicated that the entire region has suffered a great down warping due to the Himalayan upheaval. There are evidences of some pre-existing basins also".² The basal rocks seem to have faulted transversely at places where earthquakes occurred.

The alluvial deposits consist of sediments of fluviatile or subaerial formations of gravel, clay, silt, mud or sand, brought down by rivers. Gravel and sand deposits become scarce as the distance away from the hills in the north and also from the Uplands in the south increases. One peculiar feature of the plain, particularly of the older alluvial tract, is the presence of irregular nodular concretions of lime, commonly known as kankar and found below the surface at different levels. This plain is divided into two parts based on its formation and geological history: (a) The Bhangar or Bangar Plain-which is made of the older alluvial corresponding in age to the middle Pleistocene and occupying the higher grounds of the plain; and (b) The Khadar Plain - which is built up by the alluvium of recent origin occupying the lower areas, mostly the tracts covered by the annual floods on both sides of the rivers and it is still under formation by the aggradational work of the rivers. The Bangar tracts are subjected to large scale fluvial and subaerial erosions.

(ii) The Southern Uplands

The Southern Uplands occupying mostly the hilly District of Mirzapur in the southern part of this plain are related to the Peninsular blocks of India in geological formation and age. This upland tract extends in the west to the former Vindhya Pradesh region, now a part of Madhya Pradesh, in the south to the hilly areas of Kaimur and in the east to the dissected forest clad part of Palamau District of Bihar. The whole tract is often termed as 'Baghelkhand'.

Geologically, the Southern Uplands are more complex and can be divided into the two distinct formations: (a) The Sedimentary rocks of Vindhyan origin stretching from the summit of Vindhyan scarps southwards to the Kaimur range north of the Sone Gorge; and (b) The metamorphic rocks of diverse origin, prevailing mostly in the Sonepar country in the south. For a detailed geological description, the whole area may be divided into the following five subtracts*: (a) The Vindhyan Tableland; (b) The Kaimur Hills; (c) The Sone Valley Gorge; (d) The Hilly tract south of Sone gorge; and (e) The Singrauli Basin. These subtracts extend in longitudinal strips from east to west.

The other geological formation of importance is the fertile black soil, which occupies the western portion of the

* Structure and Physiography: These are based on:-
(i) G.S.I. Volume V Part I
(ii) G.S.I. Volume VI Part II
(iii) Mem.G.S.I. Volumes VII and XXXI
(iv) Mirzapur, A Gazetteer Volume XXVII
Compiled and Edited by D.L. Drake-Brochman I.C.S.
Edited 1911, Allahabad.

Kaimur tableland. This is derived from the disintegration of the basaltic rocks of Decean Trap origin.

2.4. Relief

On the basis of relief the entire region of Eastern Uttar Pradesh may again be divided into two physiographic units: (i) The Ganga-Ghaghra Plain; and (ii) The Southern Uplands.

(i) Relief of the Ganga-Ghaghra Plain

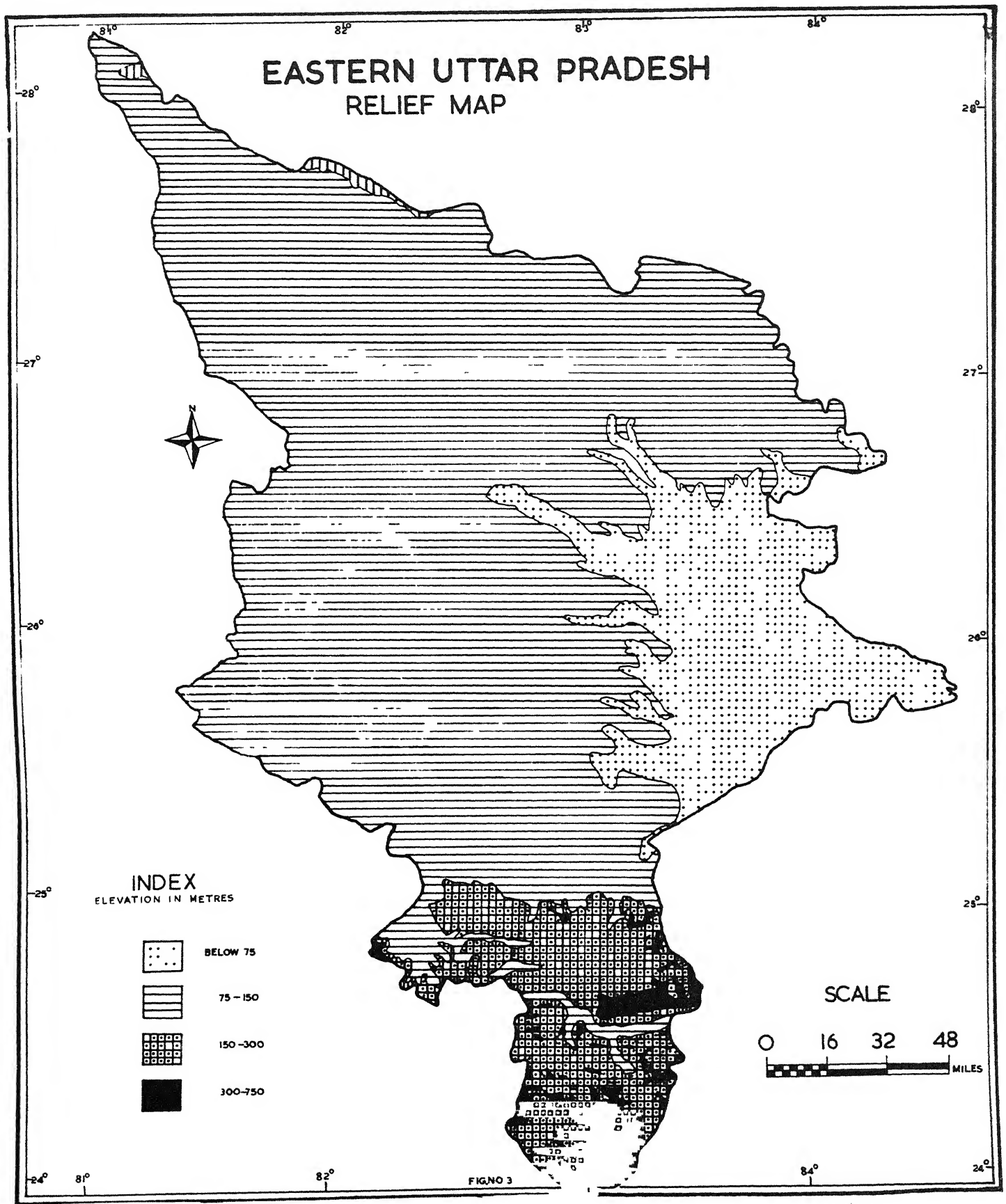
The Ghanga-Ghaghra plain formed between two mountainous regions, one in the north and the other in the south, generally presents a monotonous featureless aggradational surface. However, some physiographic contrasts of the region divide it into three subunits: (a) The Tarai region; (b) The Ganga-Ghaghra Doab; and (c) The Plain tract south of Ganga.

(a) The Tarai Region

The Tarai^{*} region extends immediately below the Bhabar^{**} tract in its south lying mostly in Nepal and covering the northern portions of Bahraich, Gonda, Basti, Gorakhpur and Deoria Districts of this region. It deserves a separate

Tarai or Terai: Means moist land; A low marshy stretch of country infested with reeds, tall grasses and scrub forests and conspicuous by the "Ubiquitous presence of water".

Bhabar: Literally means "porous land", locally known as "Ukhar Bhumī" - Waterless forests - A "dry" boulder strewn tract, usually covered with forests, but remarkable for the virtual absence of surface water.



description because topographically it presents different relief characteristics than the plain region in the south. The difference is caused primarily due to the relative proximity of the Himalayas and the adjoining Bhabar tract, which hardly maintains any surface drainage. The bulk of water contributed by rainfall and carried by numerous small streams loses itself into the gravel deposits and porous soils of the Bhabar tract and reappears in its south by syphonic action in a line of copious springs turning the land of moist tarai region into swamps and marshes. Naturally the geological history and topographical details of the plain formed in the south are interwoven with those of the Bhabar and the foothills, although the exact nature of their connections remains a matter of discussion. Slope and relief are the two important elements of surface configuration which is determined largely by the geological structures and the topographical evolution of a region.

Geologically the least conspicuous but physiographically the most monotonous is the physical landscape of the tarai region. As regards the texture and buildup on micro-pattern it is a low-lying level plain with slight undulations here and there, particularly in the extreme north, where the whole surface appears to be broken by large rivers, such as Ghaghra, Rapti, Gandak etc. and their numerous affluents which comb this region in an intricate pattern. The Dundwa range is the only outlier that approaches the northern Gonda-Bahraich frontier

for a few kilometres. Some physical landscape features of local importance are also noticed at places such as the river bluffs.

The tarai region was built up by the alluvial deposits of fine sediments during the pleistocene and subrecent times. Its formation commenced after the final upheaval of Himalayas. It is essentially a subregion of the Ganga plain. Its general slope from north-west to south-east is very slight, hardly 1.5 metre to a km. However, the transverse section from North to South shows the slopes of 1.5 to 3.75 metres per km. The Bahraich upland, which forms a uniform fall of about 20 km width is 12 metre above the general level and is an exception. As the tarai gradually slopes to the south and imperceptibly merges with the Great Plain; it is an uphill task to demarcate its southern boundary. 'Tentatively it passes through northern part of Padrauna Tahsil of Deoria District and Maharajganj and Pharenda Tahsils of Gorakhpur District. Westwards it follows the tortuous course of Rapti River upto Bhinga pargana of Bahraich District, and onwards it includes a major portion of Nanpara Tahsil of the same District. It can not be demarcated by any fixed line but only by a transitional zone'.³

(b) The Ganga-Ghaghra Doab

Below the tarai region, the Ganga-Ghaghra Doab extends southwards upto the Districts of Allahabad, Mirzapur and Varanasi, except their portions occupied by southern uplands. The alluvial sediments deposited in this plain vary in size and shape and consist of silts and clays with occasional gravel and

sand accumulations and they divide the plain into two popular classes: (i) The Bhangar or Bangar tract which occupies the higher grounds above the annual flood level or inundation surface and has no fresh layers of sediments year by year; (ii) The Khadar or Khadir tract which occupies the low ground of the flood plains and has every year fresh deposition of sediments, enriching the soil with organic matter, moisture and the required minerals making easy the cultivation of crops without much ploughing and practically with no irrigation and manuring throughout the year.

The almost featureless level of this plain from one end to another and the monotony of its relief never appear to lose their charm and attraction until the hills are approached either in the north or in the south. However, as regards small topographical facets, the plain is not without interest. In general, the plain is below 100 metre above the mean sea level except in the north west. In the east it slopes down to below 75 metre above the mean sea level (Fig.3). Thus the Ganga-Ghaghra Doab is fairly a level plain with a general slope from north-west to south-east.

The ordinary dead level of the plain is, however, occasionally marked by gentle undulations caused due to numerous drainage lines. In the vicinity of rivers and streams, the flatness of level is broken by the presence of bluffs in the upper courses and by the ox-bow-lakes, the remnants of the old beds of rivers or the occasionally found badlands and ravines in the lower courses.

(c) The Plain Tract South of Ganga

More pronounced relief is, however, noticed when this plain tract meets with the Vindhyan uplands in the south of the Ganga Valley. There the Vindhyan outliers dot the surface in the Districts of Allahabad, Mirzapur and Varanasi. They have a typical topography consisting of the small flat topped hills and heavily eroded hillocks, separated by broad embayments of alluvial flats created by the aggradational action of rivers debouching with heavy loads on way to the plain. This area may be termed as a 'bordering belt' or a 'transitional zone' which is rather a 'contact zone' of few kms in width. South of this tract the typical slopes with rugged topography form the characteristics of the southern uplands.

This plain tract extends to the south of the Ganga Valley converging an area of about $1,500 \text{ km}^2$ between Ganga river and the Vindhyan Uplands. It varies greatly in width from north to south. At some places as at Chunar and Vindhyachal, the hills advance to the very bank of this river, while at other places, the scarp is 16 kms or even more away from the river. There are a large number of water courses in this tract forming the drainage of the hills, alternated by broad span of alluvial divides, considerably broken by ravines. The low-lying areas situated between the divides and the courses of rivers or streams have varying sizes.

In the north most of the Saryupar or the Trans-Ghaghra plain is covered by the smooth surface of the tarai region byt

in the south the Gangapar plain presents a 'transitional zone' of relief.⁴

(ii) The Relief of the Southern Uplands

The Southern Uplands include the Vindhyan hills in its north part and a portion of the Kaimur range in its south part and they have the average height of about 220 metres above the mean sea level. They extend in length for about 114 kms from east to west. The width of this subregion varies from 32 kms to 48 kms from north to south. This tract covers an area of about 4,500 km². Its southern boundary is formed by the Kaimur range which has an average height of about 400 metres above the sea level. After sinking into a series of low hills in the centre, where the plateau presents an abrupt precipice overhanging the valley of the sona river, this tract rises again sweeping southwards ^{this} river into the great crag of Mangeswar, the fort crowned rock of Bijaigarh, and the Bagdhaua peak which is seen above Argarh. This tableland is irregular in its surface which is intersected everywhere by low wooded ridges lying between the valleys watered by hill torrents, some of which find their ways to the courses of Karamnasa and Chandra-Prabha rivers.

In the south-west, this tract descends with a gentle slope towards the valley of Belan river. In its southern extremity precipitions with an almost vertical descent of about 450 metres are found extending from west to east in narrow trenches, sometimes 8 to 16 kms in width, reaching the tectonic-

circum-erosional gorge of river Sone. Usually this river bed is flat but is flanked by precipitous walls.

The Sonepar upland (covering an area of about 4,300 km²) mainly consists of gorges, open basins, divides, necks and asymmetrical ridges extending from east to west in latitudinal strips. This subregion, therefore, presents a scenery of different levels of erosion. The relief of this region is composed of numerous parallel lines of low rugged rocky hills, clothed with jungles, usually of stunted growth. Here the important valleys of Bijul, Rihand, Kanhar and Pondu form the subunits of the tract and their divides exhibit various types of land features. Open basins are found in the upper reaches of the streams, while their lower reaches are occupied by gorges of various dimensions. Important instances in this respect are furnished by Singrauli, Dudhi and Kon basins located in the valleys of Rihand, Kanhar and Pondu rivers respectively. Here parallel ridges are notable features on the divides (mostly confined to the Bijawars) due to unequal erosion.

The physiographic complex of the Southern Uplands exhibits elevations ranging from 75 to 600 metres and above in height and it can conveniently be divided into three subunits: (a) The Vindhyan Uplands; (b) The Sone Gorge; and (c) The Sonepar Uplands. The Vindhyan Uplands and the Sonepar Uplands differ significantly in their physiographic characteristics, as the former are marked by wide and open basins having large areas with level or gentle slopes while the latter are noted for the absence of such extensive basins.

The Vindhyan Uplands stretch southwards from the summit of the Vindhyan scarp to the Kaimur range and then to the valley of Sone river beyond which lies the wilderness of hills and jungle clad ravines occasionally marked here and there and by the hills encircled by the alluvial basins, which cover the southern part of Mirzapur District. The Sone gorge is a deep valley flanked by high walls presenting a break in the typical topography of this subregion.

2.5. Drainage

The main drainage of Eastern Uttar Pradesh flows generally from north-west to the south-easterly direction and is composed of three major river systems which pass through the region i.e. (a) The Ghaghra river system in the north; (b) The Ganga river system in the middle; and (c) The Sone river system in the south (Fig.4). All of them ultimately merge into the Ganga river system. Besides them, there are some more notable rivers also e.g. Sai, Gomti, Rapti, Gandak, Tons, Belan etc. which drain a part of the region and have seasonal importance. *They also join one of the three systems.*

The general slope of Eastern Uttar Pradesh from north-west to south-east governs the normal pattern of major drainage lines because they also flow in the south-easterly direction in the Ganga-Ghaghra Doab. The southern uplands, which are composed of a more complex structure of geological formations and have resultant relief features characterised by changing slope

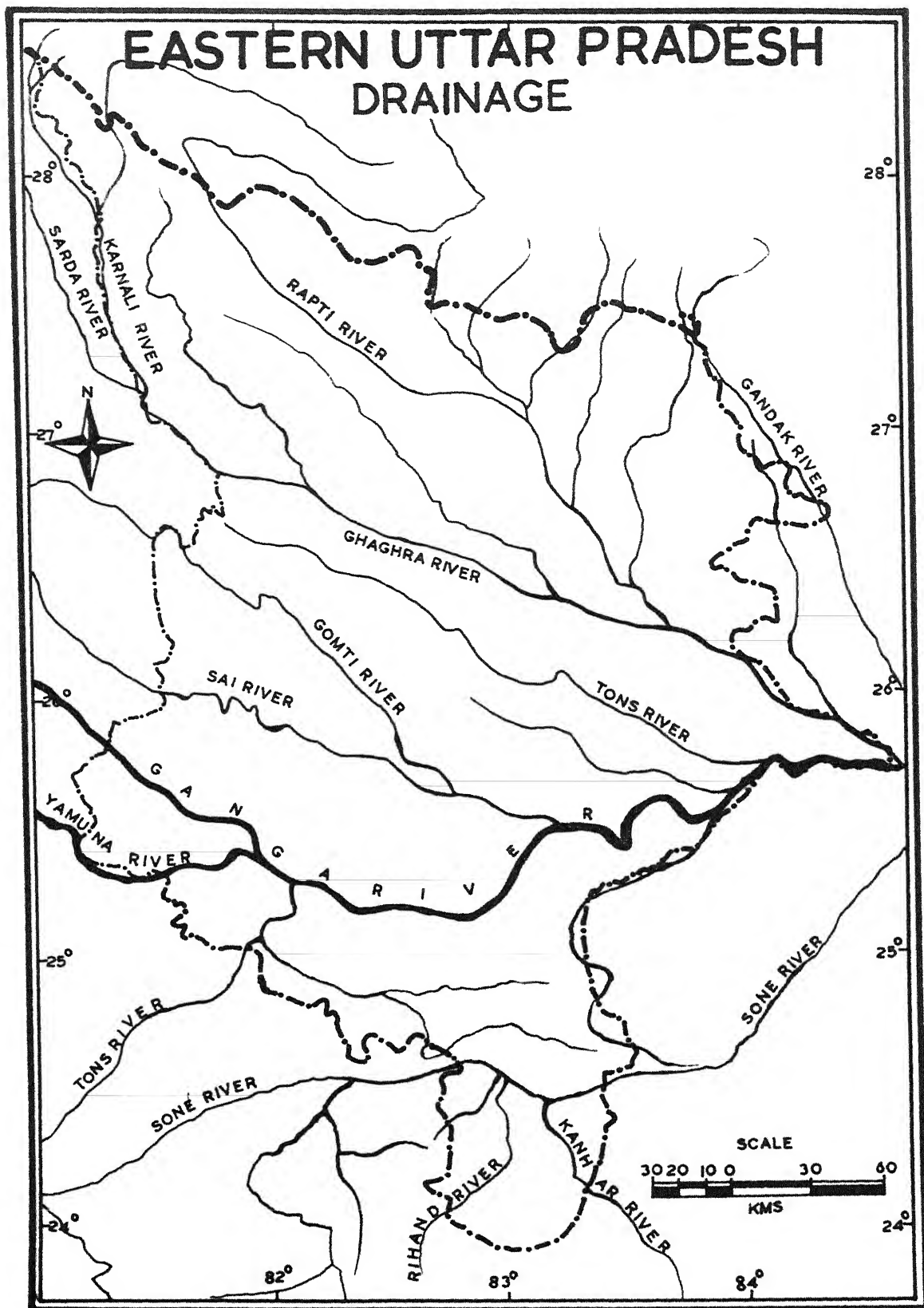


FIG.NO.4

from one part to the other have, however, an intricate pattern of drainage lines which is a remarkable feature of this subregion.

The drainage of the Saryupar region i.e. Trans-Ghaghra tract ultimately joins the Ghaghra river excepting the portion of the drainage formed by the Great Gandak river which discharges directly into Ganga river at a considerable distance below the Ghaghra-Ganga confluence. Major tributaries which contribute to the flow of Ghaghra river from the north are the Kuwano or Kuano, the Rapti, the little Gandak and the Great Gandak which have hundreds of their own tributary streams and connecting hill torrents mostly of unstable and seasonal character.

Shifting nature of the channels including the main river Ghaghra is the marked trend of the drainage lines in this subregion. There are many abandoned courses of rivers in this area such as the Burki Rapti or old Rapti (a left course of Rapti) and the little Gandak (a left course of Gandak). Rapti and Gandak have tortuous courses particularly in the upper reaches, having successions of loops and bends. "A micro-pattern of the subregion reveals a surface that is entirely criss-crossed by small streams and nallas and is infested with marshes and swamps".⁵ This is partly due to the relative proximity of the outer foothills of Himalayas and the adjoining coincidence of the Bhabar and Tarai tract and also partly due to the high amount of annual rainfall. The preponderance of small tributary streams and the fine texture of the drainage lines impart to

this region a characteristic dendritic pattern of drainage. The rivers lost in the Bhabar tract, a boulder strewn subregion, reappear by syphonic action in a line of copious springs covering the area below with marshes and swamps in the northern part of Tarai region due to its defective drainage pattern. The river Ghaghra receives almost no streams of importance from the south except a few affluents of comparatively smaller dimensions. In dry season, Ghaghra with its tributary streams shrinks comparatively and sandbars appear in all parts of the river course on either sides in the shape of low sandy stretches known as "Manjhas".

The drainage lines of the Ganga-Ghaghra Doab cover the largest area of the region and join the main trunk of Ganga river flowing from west to east. Gomti, the largest tributary of Ganga in the area, divides the doab region into two unequal parts, the larger area being in the east and the smaller in the west. The Gomti-Ghaghra Doab is drained by many small but important rivers such as Chhoti Saryu, Mangai, Besu and Ganji. They run almost parallel to each other and ultimately discharge themselves into Ganga river. Another river Barna drains the Gomti-Ganga interfluvium and joins Ganga river near Varanasi. Gomti is also fed by several tributary streams, chief of these being Pili and Sai and is noted for its deep bed.

Most of the streams attain extra ordinary dimensions in floods during the rainy seasons. River Ganga has high floods as it receives the rain waters of its tributaries also. River

channels have their set courses which are usually limited to normal discharge of water. Therefore, they are subjected to overflow causing floods due to heavy rainfall. The excess water above the normal discharge of a channel rushes in bulge like a downstream tide, overflowing and flooding the plains below on both the sides of the channel. Large areas are flooded in this way, causing a temporary dislocation of transport and communication systems and devastating life and property on large scale in the region.

Almost all the rivers of this region are erratic in action and notoriously dynamic in character, especially the major rivers such as Ghaghra, Rapti, Gandak, Gomti and Ganga. Shifting nature of their channels is a marked feature. During floods the rivers have a tendency to straighten their courses by cutting through the necks of meanders. This action is responsible for the formation of ox-bow-lakes and it causes water logging also. There are instances, when the rivers shifted their courses in the historic past covering large areas, on their sides and deserting a part of their former beds in the shape of ox-bow-lakes, meander loops and dead arms, at times causing ruins of the nearby settlements. An example is furnished by Ballia town, where the river Ganga had shifted its course in the past by about 36 kms between Bhojpur Tal and Suraha Tal necessitating a shift of township to the north. Some towns on the bank of Ghaghra, such as Barhaj, and Gola, have also been affected similarly in the past.

The two chief drainage lines of the southern uplands are covered by Ganga and Sone rivers which usually flow from west to east in the northern and central portions of this tract respectively. Besides them, there are five medium sized streams also in this subregion, namely; Belan, Karamanasa, Chandra Prabha, Rihand and Kanhar in addition to a number of minor streams. The latter are mere hill torrents which swell to the considerable size during the rains but shrink in the hot and dry season to an insignificant dimension, in most cases being turned to a series of disconnected pools. Except the Bijaigarh plateau and the southern slopes of the Kaimur range, the entire southern uplands join the catchment area of river Ganga. The important streams which drain this plateau through rapids and falls caused by varying slopes and ultimately discharge their waters into the Ganga system are Karnauti, Ojhala, Khajuri, Chatar and Zirgo. River Karnauti in its lower reaches seems to have occupied some abandoned channels of Ganga. The faulted course of Belan drains a part of the main Vindh^yan plateau and discharges its water into Ganga through Tons. Below^{ly} itself receives the waters of a number of small torrents which are seasonal.

To the south of the Kaimur range, there is only one small but important stream named, Ghaggar, which drains the northern precipices of Bijaigarh plateau and discharges itself into river Tons. River Sone flowing through a strike valley joins Ganga river in the east, outside the study region of this thesis in which it flows for over 80 kms with a gentle

slope throughout. In the south, Singrauli and Dudhi river basins are located, which have a large number of tributary streams, either like Ajhir, Bichhi, Lauwa and Thema which join the Rihand and the Kanhar systems or like Bijul which flows into the Sone valley directly. In fact the entire area of the Sonepar country drains into the Sone basin, through its tributary streams like Bijul, Rihand, Kanhar and Pondu.

Few big rivers and many streams together with their tributaries make out the drainage pattern of Eastern Uttar Pradesh. All the drainage ultimately finds its way to the Ganga basin. It has a fine texture and its pattern differs from rectangular in shape, ⁱⁿ north of Rajbham scarpland to the dendritic ⁱⁿ shape in the southern part of the Rihand-Kanhar divide. A trellis pattern is noticed on the slopes of ridges, on which ephemeral rills of streams descend. Slow but regular undercutting of the Vindhyan scarp is causing a northward shift of the Sone valley, although maintaining its precipitous character

2.6. Climate

Despite the fact that Eastern Uttar Pradesh is situated in the interior part of India, away from the equator, it is reigned supreme by the Monsoon type of climate with all its vagaries and extremes in temperature, pressure, wind humidity precipitation etc. The Indian Meteorological Department has recognised four seasons in this country which influence the climate of this region also. They are (i) The Rainy season with south west monsoon regime, generally covering the period

from July to September; (ii) The season of retreating south west monsoons extending from October to November; (iii) The winter season with north-east monsoon regime covering the period from December to February, and (iv) The summer season extending from March to June.

(i) South-west Monsoon Regime (Rainy Season)

By the mid-June, the air pressure is very low all over this region and has a decreasing westward trend. The temperatures begin to drop considerably with the arrival of the south west monsoon, particularly from the latter half of June. But even in July when the monsoon is expected to be well established over the region, the day temperatures may rise at times to 40°C due to break of rains. The period from mid-June to mid-September is the rainy season here. It starts with the cloud bursts of the summer indicative of the advent of the south west monsoon in this region usually in the third week of June every year. It has a sudden rise of relative humidity to over 70 percent, a sudden fall of temperatures usually by 6°C to 8°C and sudden change in wind direction from westerly and northwesterly to easterly and south easterly. This season accounts for about 88* percent of the annual rainfall of this region on the average. During this period the sky remains generally over cast with cumulous, cumulostratus and strato-nimbus clouds for days together. This regime of the south-west monsoon is a part of the summer monsoon.

* Vide Table No. 1.

This season is rather unpleasant and is marked by climatic conditions having excessive humidity combined with high temperatures. Its moist heat becomes intolerable which benumbs the active human nerves, particularly in the northern part of the study region and is also responsible for diseases like malaria, plague etc. The following table shows the average seasonal rainfalls in the Districts of Eastern U.P.

Table II-1*

Normal Seasonal Rainfall (in percent of the total normal annual rainfall)

Name of the Districts	Rainfall in winter (Dec. to Feb.) in percent	Rainfall in summer (March to June) in percent	Rainfall in Mon-soons (June to Sept.) in percent	Rainfall in post-monsoon season (Oct. to Nov.) in percent	Total annual rainfall in cms	Total number of rainy days
1. Bahraich	4.3	4.1	88.3	5.3	114.78	39
2. Gonda	3.6	3.6	88.0	4.8	114.96	37
3. Faizabad	3.7	2.7	88.5	5.1	100.84	29
4. Sultanpur	4.0	2.5	88.7	4.8	100.02	42
5. Pratapgarh	4.2	2.6	88.5	4.7	97.64	40
6. Basti	3.2	4.5	86.9	5.2	102.13	36
7. Gorakhpur	2.8	5.1	86.7	5.4	136.41	45
8. Deoria	2.9	5.4	86.1	5.6	114.51	40
9. Azamgarh	3.9	3.1	87.6	5.4	102.13	36
10. Jaunpur	3.8	2.2	88.7	5.3	99.95	42
11. Ballia	3.8	2.9	88.1	5.2	101.31	36
12. Ghazipur	4.1	2.4	88.1	5.4	105.18	41
13. Varanasi	4.5	2.6	87.6	5.3	105.64	39
14. Mirzapur	4.7	2.5	87.9	4.9	113.41	43
15. Allahabad	4.5	2.3	88.5	4.7	97.64	40
Eastern U.P.**	3.9	2.9	88.0	5.2	99.30	40

* Table II-1 is based on the data "Season and Crop" Report of Uttar Pradesh, 1967-68 Ed., 1974, Government Press, Allahabad.

** Based on Ram Das, L.A. "Weather and crops", Handbook of Agriculture; Indian Council of Agricultural Research, New Delhi, 1961.

(ii) Retreating south-west Monsoon Regime:

By October the south-west monsoon begins to retreat. The day temperatures are moderate but the night temperatures decrease rapidly. Sometimes the month of October has high temperature and high relative humidity due to which it proves oppressive. The rains retard from the tarai region comparatively later than from the Ganga plain. This phase of seasonal pattern remains almost the same every year. "A premature departure of the monsoon is a catastrophe greater than its delayed appearance, for while the latter only prolongs the discomfort and expectant in-activity of the hot season, the former dries up crops which have relied on a continuance of the rains".⁶

October and November are the transitional months. A general rise in pressure proceeds by and by in November and it develops a 'Bar High' over the region later on. In this period the winds are more variable but less forceful due to the retreat of summer monsoons. Their easterly flow is hampered gradually by northerly, north-westerly or westerly turns. The number of calm days is, however, over 65 percent. The cloud cover is less marked and the humidity decreases till November. But it rises again since early December.

(iii) The Winter Season with North-east Monsoon Regime:

The cold weather actually starts from December and ends by February. It is characterised by westerly and north-westerly winds. Although in November, the cold weather is set in with

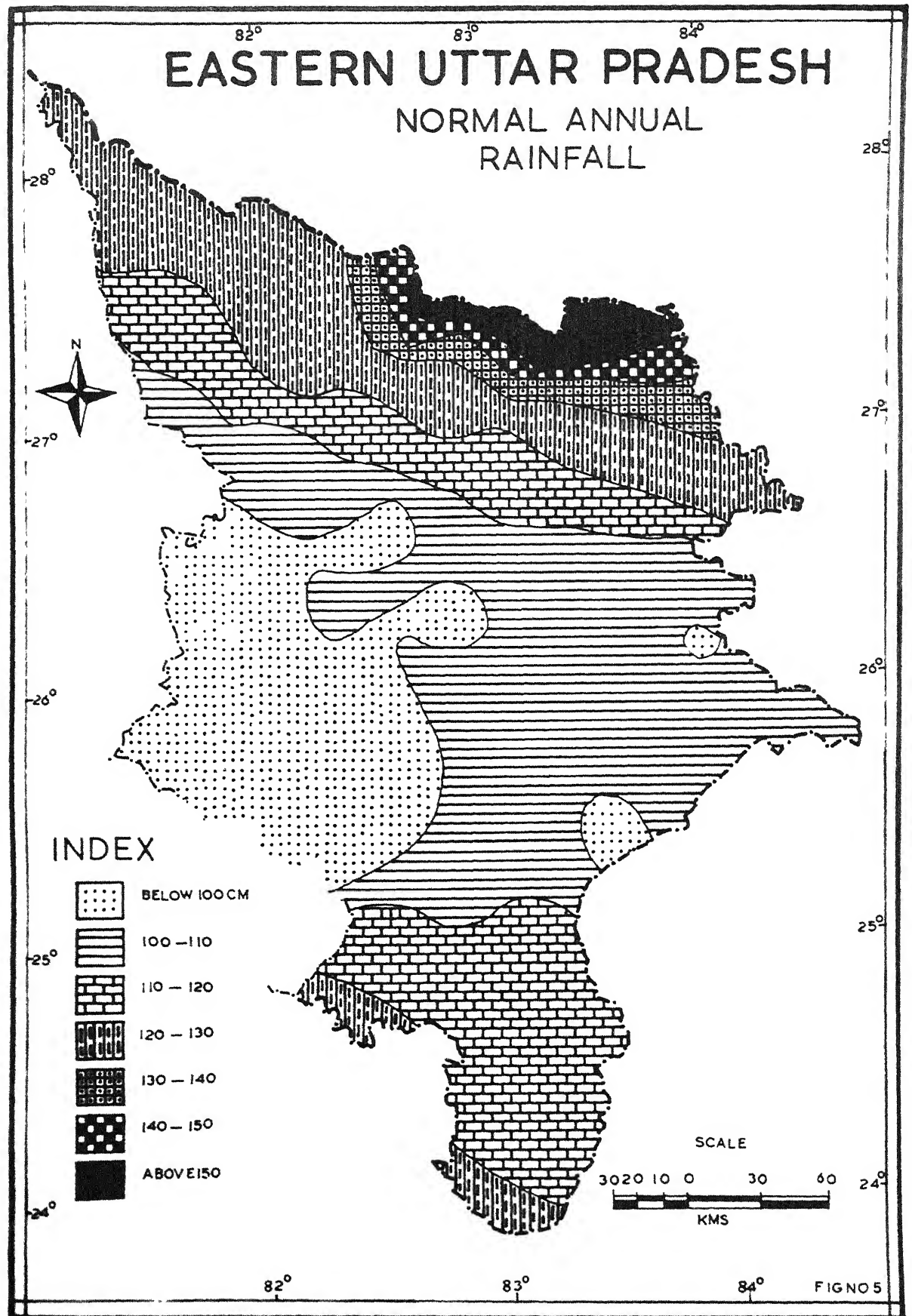
an appreciable fall both in temperature and relative humidity, yet the high atmospheric pressure begins to intensify over the whole region mainly by the end of December or by the beginning of January. The bright sunny winter of the region provides it with one of the finest weathers of the world, although it is occasionally disturbed by cold and rainy weather caused by westerly disturbances. During such weather conditions of the winter months, the temperature comes down to 4.5°C or even to 4°C , specially in the wake of cold waves, associated with the rear of the western disturbances, and it brings occasional frosts during nights. In general, the frost hazards have averages of 5 to 10 days in each winter season over Eastern Uttar Pradesh.

The cold waves and accompanying frosts are quite injurious to the standing rabi crops. At times high humidity with fogs dominates the area causing poor visibility for a number of days particularly in the months of December and January. The sky is clouded or even over-cast at least for 4 or 5 days in a month in this season. In abnormal years heavy showers may come near about Christmas and also by the end of January. The nasty cold winds as blew in 1961 during this period are really very trying to the people of the region in general and to the people of the tarai region in particular. After February the pressure falls rapidly with the rising temperature and atmospheric currents are also reversed.

(iv) The Regime of Transitional Hot Season (Summer season):

The temperatures start rising from the beginning of March and due to their continuous increase, the cold weather yields place to warmer and still warmer weather. The 'Bar High' prevailing over the region gradually turns into 'Bar low'. Occasionally the feeble western disturbances may reach the region in this period or local thunderstorms may occur to break the season's monotony. The mean maximum temperature rises to about 28°C during April and exceeds to over 40°C in May, the hottest month of the season. Sometimes the maximum temperature during this period may go upto as high as 47°C (116.6°F)⁷ at certain places e.g. at Varanasi and Allahabad and under such condition scorching heat results accompanied with hot winds, popularly known as "Loo" in the region, which cause great panic among the people and also prove dangerous to the animals.

The prevailing hot winds come generally from the west. Their intensity begins to increase from the end of March and they blow strongly in April and May with frequent interruptions by easterly breeze till early June. Hot blasts of winds known as 'Loo' are the characteristics of the weather during this period. The ground remains parched and most of the outdoor human activities are confined to the early and late hours of the day. Nights become cooler, particularly in the later part. Dust and thunderstorms occasionally break the monotony of the weather in the day. The season is quite pleasant, when it has normal warmer days and cooler nights. Humidity lowers down to its minimum by May and the sky is generally clear till the end



of this season. Later on atmospheric conditions show an appreciable change awaiting the arrival of the south-west monsoons in this region by the middle of June.

From the figure 5 it is quite obvious that the whole of Eastern Uttar Pradesh is a region of moderate rainfall and it roughly falls between the range of Isohyets 100 cm and 150 cm. The amount of rainfall in the Ganga Plain generally increases from west to east. Eastern Uttar Pradesh also follows a similar trend. In its western fringe it has somewhat lesser amount of rainfall which increases towards north, south and east parts of the region.

(v) Characteristics and Effects of Climate:

Heat waves coming from west and sweeping the whole of Eastern Uttar Pradesh unhindered during the hot summer months are as injurious to the standing crops as the cold waves and occasional accompanying frosts which persist sometimes for a week or even more during winters in this region as it did in 1961. Generally the high physical features of the Southern Uplands and the areas in close proximity of the Himalayas as the Saryupar plain do not suffer from the extreme hot weather conditions and at times they bring a favourable weather regime to the Ganga-Ghaghra Doab also. However, "the temperature remains usually high and as such the entire region has minimum temperature well over 42°F (36.25°C) throughout the year".⁸ But for few days' occasional frosts come in the wake of cold waves during winter months which drops this minimum much below the above level.

Sun-shine is more than adequate in this region.

Excessive rains and not the inadequate amount of sunshine are responsible for an occasional set back to the plant growth and they seem boring to the human mind. Sometimes, however, continuous rainfall or cloudiness produces foggy weather causing inconvenience to human beings and spreading diseases which may be injurious to their health, energy and happiness. They disturb agriculture also harming the flowering crops in the field.

From the annual amount of rainfall available to this region, it could be easily seen that it is very much suitable for agricultural purposes. But the rainfall vagaries colate the dry and wet spells at times responsible for breaks and bursts of rainfall. Thus both the droughts and floods make the economic health of the region miserable. Infact it suffers not as much from the lack of adequate amount of rainfall as from its ill-distribution both in space and time. The concentration of about 88 percent of the total amount of annual rainfall during the rainy season only and that too only within few hours on the 45 to 55 rainy days in the season in this region results in quick run off without giving full benefit to the soil.

"Leather has empirically shown that relationship between the actual fall and possibly useful fall varies from 99.00 to 66.60 percent depending on various factors".⁹ Its paucity during winter months is quite evident as Rabi crops get only 3.9 percent of the total annual rainfall (vide Table II-1). It also reveals that in winters in this region the general pattern is largely reversed with the seasonal rhythmic change and this

happens because of the fact that the cyclonic depressions coming from the side of West Pakistan and Arabian Sea extend their influence through less frequently but quite heavily upto the Middle Ganga Plain and sometimes even beyond, covering rarely the "whole of northern India including Bengal".¹⁰

The arrival of monsoon may be sometimes too early or too late by about 10 to 15 days or even more and may bring uncertainty to the sowing season of Kharif crops in the region. At times the monsoon breaks with a wide gap causing drought conditions which adversely affect a successful cropping. But if there is heavy rainfall suddenly, it affects the standing crops through floods. In case the monsoon ends somewhat earlier, it results in considerable crop damage and causes difficulty in the rabi sowing also. But when it continues late till the middle of October, it delays the Kharif harvesting and also the Rabi sowing, putting the farmers to a double disadvantage at the same time.

There are variations in the amount of rainfall from year to year and at times they are very large also. Thus the annual variability of rainfall occasionally assumes alarming proportions. The efficiency of rainfall is greatly reduced due to its concentration in about one-third period of the year as well as due to its irregular and large variations. On the basis of rainfall records of fifty years (1875-1924), it has been found that the "coefficient of variability of annual rainfall in the entire Eastern Uttar Pradesh is 23 percent. In case of Saryupar plain with 125 cms or more rainfall annually

it is only 20 percent. But in case of Ganga-Ghaghra Doab with 100 cms or less annual rainfall it is as high as 30 percent".¹¹ The distribution of rainfall depends much on the fall of axis of the seasonal trough of low pressure, which moves back and forth in the southern or northern parts of this region under the influence of the frequency and tracks of the infiltrating depressions coming from the Bay of Bengal. "This dynamics naturally causes variations in the annual amount of rainfall from one subregion to the other".¹²

Usually in course of four or five years cycle, every two or three favourable years are alternated by one or two unfavourable years. However, the favourable years do not always account for bumper crops to the poor farmers because of their limited holdings and meagre resources; on the other hand the unfavourable years always damage their economy and put them into debt. Their economy, therefore, remains shattered for a long time. Under such precarious circumstances, agriculture, the main economic pursuit of the people of this region is being operated here and so it needs elaborate facilities for irrigation. There must also be made suitable drainage lines to make quick run off of water during the floods. A scientific weather forecasting will be a good help to the farmers indeed.

2.7. Vegetation:

The plants grown in a region are mainly those which are best suited to its physical environment. The important factors

for their growth are the soils and the climatic conditions, such as temperature and precipitation. The natural vegetation of Eastern Uttar Pradesh is 'Arboreal'. The original cover of the dense forest has been profoundly modified, because of an almost unhindered human occupancy for over three millennia of years and on account of clearing for agriculture and due to unregulated grazing, which have stripped the forest cover from nearly whole of the plain region and much of the lower hills of the plateau in the southern uplands are turned into scrubs. There is clear evidence of the fact that many centuries ago, large parts of the plains had usually rich cover of forests. Even upto 40's of the last century large areas of Saryupar region were densely forested and infested with wild animals.

(1) Forest Cover:

As stated earlier, the forest cover in Eastern Uttar Pradesh is very scanty at present in comparison to some other parts of India. The Districtwise distribution of forests of this region is given below:

Table II-2

Distribution of Forest cover in Eastern Uttar Pradesh (in hectares)
1968-69

Name of the Districts/ Area/State/ Country	Total area (in Hect.)	Forest area (in Hect.)	Percentage of forest cover to total area	Percentage of forest area to t total for area of Eastern U
1. Mirzapur	1,104,021	433,915	39.31	56.52
2. Varanasi	527,738	76,859	14.56	10.01

Contd.

3. Bahraich	689,608	101.449	14.71	13.22
4. Gonda	743,029	72,366	9.75	9.42
5. Gorakhpur	637,402	55,707	8.75	7.27
6. Basti	734,935	5,705	0.77	0.74
7. Sultanpur	445,979	1,446	0.33	0.19
8. Deoria	542,298	1,099	0.20	0.14
9. Faizabad	435,457	1,390	0.32	0.18
10. Pratapgarh	367,872	799	0.22	0.12
11. Azamgarh*	574,674	190	0.04	0.03
12. Jaunpur	402,676	Nil	Nil	Nil
13. Ghazipur	337,115	Nil	Nil	Nil
14. Ballia	332,141	Nil	Nil	Nil
15. Allahabad**	745,862	16,599	2.23	2.16

Eastern U.P.	8,601,807	767,524	8.92	100.00
Uttar Pradesh	29,495,750	4,022,030	13.63	100.00
India	326,062,743	71,045,085	21.90	100.00

1. Statistics of forest area are based on Forest Statistics, Uttar Pradesh, 1971, by T.N. Srivastava, Chief Conservator of Forests, U.P., pp. 88-94.

** Allahabad means the whole area of the District of Allahabad but the forests of this District lie in its southern Tahsils which are out side the study region of this thesis.

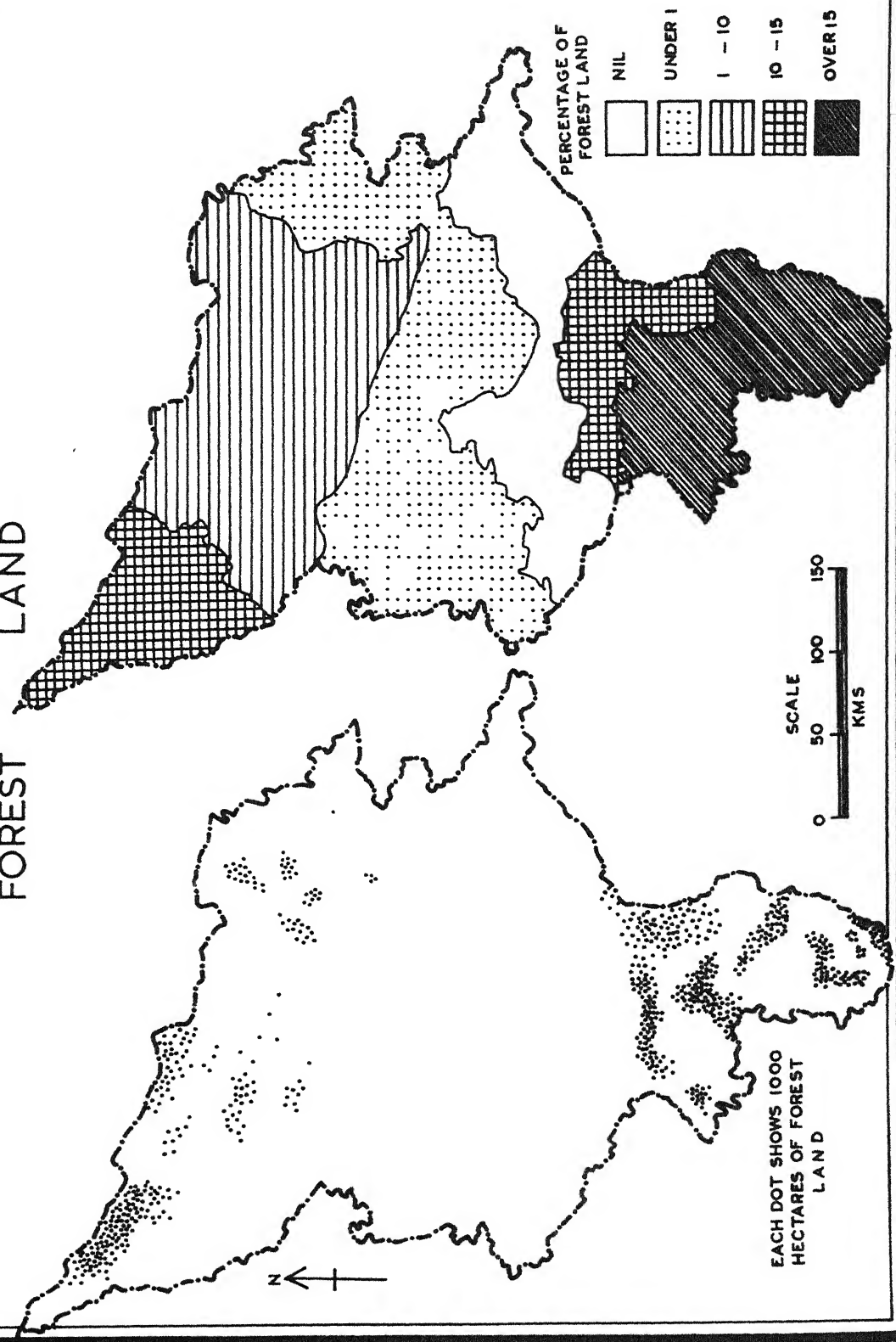
* Azamgarh maintains some forest cover but it does not come under the State Government's legal classification.

2. Forest land includes barren, uncultivable waste land also.

3. Figures for India relate to the session 1962-63.

It is evident from the above table that the percentage of area of the forest cover to the total area of forests in Eastern U.P. is far below the averages for this State and the country. The main concentration of forests in this region is found in two narrow belts as shown in Fig.6. They are (i) the Saryupar plain in the north part of this region extending in the Districts of Bahraich, Gonda, Gorakhpur and Deoria, and (ii) the Gangapur tract in the southern part of this region comprising Robertsganj and Dudhi Tahsils of Mirzapur District and Chakia Tahsil of Varanasi District. In both these bel^ts,

EASTERN UTTAR PRADESH FOREST LAND



FIGNO 6

different sets of conditions are responsible for the forest growth. Whereas in Tarai region excessive humidity and fertile soil have caused the luxuriant growth of vegetation, in the southern uplands the rugged terrain and unsuitability of land for cultivation have preserved most of the forest cover as natural vegetation. But the Ganga-Ghaghra Doab which was once rich in forests has now lost almost all its forest cover.

Apart from the forests, there are various wood-lands, shrub lands and bush lands throughout the southern hilly tract of this region. Patches of shrubs and grasses are also seen in the ravine pockets of the river basins such as those of Gomti, Sai, Tons, Rapti and Kuwano. The tamarisk trees grow well in the Ghaghra diaras (low-lands). In addition, these plains have also the tree plantations, groves, orchards etc. grown by human efforts.

Practically all the forest land of the region is owned by the State Government and is managed by the Forest Department of this State. Administratively the forests have been classed into three categories known as their legal classification viz., Reserved, Protected and unclassed forests. The total forest area of Eastern U.P. is 767,314 hectares which includes the whole of Eastern and Southern circles and a part of the Research and Development circle as given in the table II-3.

The natural vegetation of Eastern Uttar Pradesh can be grouped into two major types: (i) The tropical Moist Deciduous Forests; and (ii) The Tropical Dry Deciduous Forests. The

tropical moist deciduous forests occupy a narrow tract in the Tarai region. They have tall trees (24 to 36 metres high) and have dense undergrowth of thickets owing to the greater availability of sunlight. Sal is the principal tree of this area. The tropical dry deciduous forests are scattered throughout the major parts of Eastern U.P. The trees are generally smaller (15 to 23 metres high) and their undergrowth is not so dense as in the case of moist forests.

Table II-3

Legal classification of Forests of Eastern Uttar Pradesh, 1968-69.

Circle/Division	Reserved (Hect.)	Protected (Hect.)	Unclassed (Hect.)	Total (Hect.)
A. Eastern Circle:	176,644	2,062	57,710	236,416
1. North Gonda Div.	49,300	Nil	20,933	70,233
2. South Gonda Div.	6,252	Nil	19,060	25,312
3. Bahraich Div.	75,569	2,062	6,344	83,975
4. Gorakhpur Div.	45,523	Nil	11,373	56,896
B. Southern Circle:	88,482	134,495	304,286	527,263
1. Varanasi Div.	76,859	Nil	56,470	133,329
2. North Mirzapur Div.	Nil	Nil	163,523	163,523
3. Dudhi Div.	11,623	134,495	84,293	230,411
C. Research & Development Circle				
1. Afforestation Div.	1,366	Nil	2,269	3,635
Eastern U.P.	266,492	136,557	364,265	767,314
Percentage of Eastern U.P.	34.73	17.79	47.84	100.00
Uttar Pradesh	3,135,675	163,137	723,218	4,032,030
Percentage of Uttar Pradesh	77.96	4.05	17.99	100.00

(ii) Forest Products:

The important species of plants found in Eastern U.P. include sal (*Shorea robusta*), shisham (*Dalbergia sissoo*),

Haldu (*Adina cordifolia*), Khair (*Acacia catechu*) etc. Among other species, mention may be made of Banyan (*Ficus indica*), Pipal (*Ficus religiosa*), Gular (*Ficus glomerata*), Mango (*Magnifera indica*), Mahuwa (*Maduca latifolia*), Jamun (*Eugenea jambolana*), Babul (*Acacia arabica*), Dhak (*Butea frondra*), Neem (*Margosa*), Tamarind (*Tamarindus indica*) and Ber (*Zizyphus jonjula*) etc.

Bamboo (*Denderocolamus strictus*) is of a different genus than the tree. The Tarai region of Eastern Uttar Pradesh is credited with luxuriant growth of bamboos. The southern upland tract is noted mainly for its stunted growth. Besides the trees and bamboos, extensive patches of tall grasses are found in abundance in this region, particularly in the Saryupar plain and in the southern hilly tract. The sabai grass of Tarai region is the most important which is used as a raw material in the paper industry.

Among the forest products of eastern U.P., timber and fire wood are also important. The other note worthy products consist of tenduleaves, Katha, Balbgrass, thatching grasses, Gums, Bark, Mahuwa and various fruits which account for a good amount of Government revenue. The forest products are mostly exploited by the following agencies: (i) The State Government's Forest Department; (ii) Purchasers; (iii) Right holders and concessionists; and (iv) Free grantees. The forest products provide economic engagements to thousands of persons and as such they influence the occupational distribution of population

in this region. They also account for the engagement of a large number of persons in forestry and forest based industries.

Forest is a free gift of nature to man and it provides a variety of products for him. But because of a meagre forest cover in East U.P., a large scale industrialisation based on forest products is not possible. However, the expansion of forest based industries on a small scale basis will surely make greater use of locally available vegetation resources and then can contribute substantially to the development of the regional economy. "Forests have played an important role in human affairs by affecting the economic activities of man at all periods, even prior to those for which we have any written record. However, both their actual and relative values have differed from time to time as then vary^{ing} with the stage of human development and the degree of such development attained in particular areas".¹³

Keeping in view the potentialities of the forest resources of eastern Uttar Pradesh, the development of forest based industries on a small scale basis holds a good prospect for this region, provided a balanced and well planned scheme of forest exploitation is pursued and suitable measures for their conservation are implemented. The income derived from the forest based raw materials in this region will certainly accelerate the pace of economic reconstruction of the region and provide employment to thousands of persons.

2.8. Soils:

Eastern Uttar Pradesh which has two broad physical units i.e. (i) The Plains; and (ii) The Southern Uplands, has developed two characteristic types of soils also: the alluvial or the drift soils in the former and the locally developed soils or residual soils in the latter. The plains are built of alluvials which go down in ~~depth~~ to many hundred metres of thickness, varying from place to place. Sediments of various sizes brought down by the rivers coming from Himalayan regions have developed the broad tract of level plains of the Ganga-Ghaghra Doab which is one of the richest agricultural areas of the world. Most of the sediments have undergone little pedogenic evolution and so they are still largely immature and ^{such} as they have not developed any characteristic soil profiles.

Because of their common origin and identical ecological environment, they show in general, subordinate variations in colour, texture, porosity, moisture content and consistency. Despite these variations, the main features of all the soils are derived from the deposition of sediments (silt, clay, sand, fine sand etc.) laid down by the major rivers and their tributaries. Thus the alluvial soils differ in texture and range from drift sands to rich loams and from fine silts to stiff and heavy clays. In colour they vary from the light to the dark shades. As regards the natural characteristics of the alluvial soils, generally, they are rich in minerals and organic plant foods like potash, phosphoric acid etc. which are largely required by the plants. There is, however, serious

deficiency of nitrogen and humus contents in them which may be made good by using chemical fertilizers and compost manures.

The tarai region has wet soils which are marked by fine sediments and excess of moisture due to heavy amount of rainfall and considerable seepage in the region. "The grasses and forests of this region have given to the soils of Tarai very good supplies of organic matter due to the favourable conditions for their accumulations".¹⁴ The soils of Tarai are generally stiff and heavy clays, but at places the rich alluvial loams are also found. The excess of water is responsible for water logging and for marshes and swamps on its surface. High moisture, high temperature and prolific growth of vegetation cause the unhealthy climate of Tarai region which is the source of numerous diseases.

The Bhangar or Bangar soil of the upper plains is the older alluvium with more clay composition, generally of dark colour infested with Kankar deposits throughout. Kankar ridges come to the surface or even project high in the areas under active denudation. The soil differs in consistency from drift sands to loams and from fine silts to stiff clays. The Bangar land covers the upland tracts on the interfluvies between the rivers, beyond the limits of annual floods. The soil lying above the general level of the flood plain is subjected to considerable denudation due to heavy down-pours of rain water. In the upland or uparhar tracts, the main soil is the loam of a more solid description which varies with a good to a fair level of fertility. On the subordinate water sheds it has a

lighter variety known as 'Bhur sawai'. On the banks of Ganga and some other elevated ridges it degenerates into "bhur" or almost pure sand. On the other hand, the soil stiffens into heavy clay known by ordinary name "Matiyar" in the depressions. Loam is known by different names such as "Dumat", 'Doras' etc. Lighter loams are called "Sigon" in the District of Jaunpur which have a mixture of two-thirds of sand and one-third of other poor clays.

"The Bangar tract contains the patches of usar infestations increasing towards the western portion of the Ganga-Ghaghra Doab. The formations of Kankar and nodular lime concretions through capillary action are also noticeable".¹⁵ In the subsoil of Bangar, there is an impervious clay. This is important for the construction of wells which are urgently needed for irrigation. Its layer creates hard pans with resultant water loggings giving rise to alkalinity and salinity. The distribution of saline and alkaline soils is also extensive throughout this tract. Large areas have become impregnated with these salts, locally known as 'reh or kallar' which has high deleterious effects on agriculture. "The reh is the mixture of sodium carbonate, sulphate and chloride with some calcium and magnesium salts".¹⁶ The injurious salts are confined to the top layers of the soils. They are charged with capillary transference of saline solutions from the lower layers. Besides, their origin in the soil itself, some of these salts are introduced by rivers and canal waters also. In many parts of Eastern Uttar Pradesh, without any underground drainage, the

salts become concentrated and the capillary action during summer months brings them to the surface where they form a white efflorescent crust.

The Khadar or Khadir i.e. newer alluvium is generally of light colour and is less kankary in composition. It is newer in age and consists of finer sediments. It occupies the low land tracts or flood plains. It is subjected to flushing during the rains and is replenished every year with fresh layers of newer alluvium. Therefore, it is fertile and needs no manures or irrigation for raising the crops even during the dry months. The Khadir soil naturally contains a large percentage of humus required for the proper growth and development of plants. A large moisture content is the marked feature of the soil which mostly consists of fine silts, but has also sands at places, such as along the courses of Ghaghra and Gandak rivers.

'Karail' soil, which is found in a narrow strip in the Ganga valley, contains much alumina and when wet it becomes extremely soft and sticky. So much so that it is almost impossible to pass over it on foot during the rains. On the other hand when dry, it becomes very hard and its surface splits into cracks and fissures making ploughing and sowing impossible. No irrigation can be provided to this soil as the water sinks rapidly through the cracks into its sandy subsoil. So great is the hardness that it can not be worked or ploughed unless thoroughly soaked with water. The 'Karail' soil has the capacity of retaining much amount of moisture which it needs for a good soaking. It is very good for raising rabi crops of a high

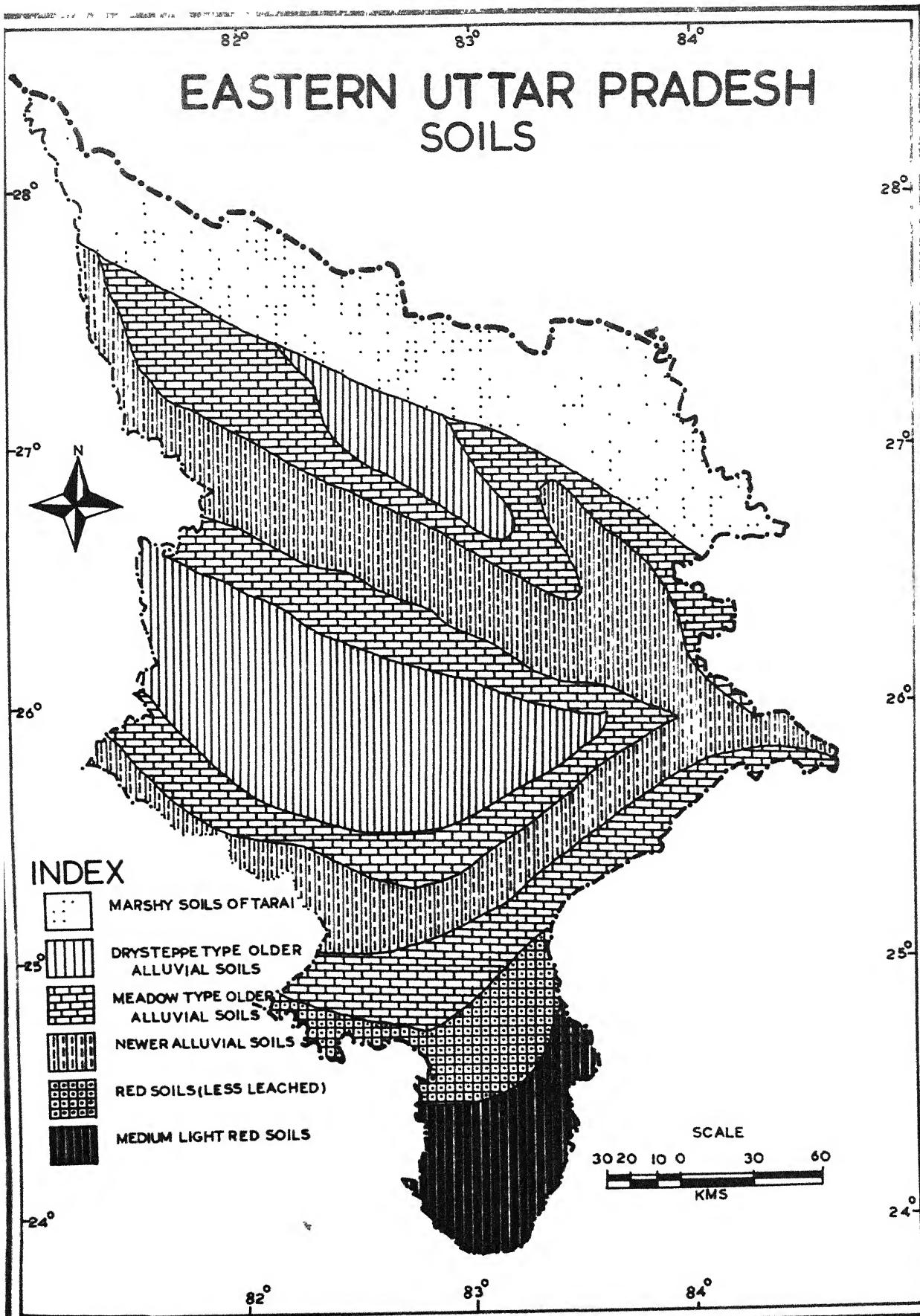
quality even without manures and irrigation. The crops have high yields in this soil having a normal rainy season even in the absence of winter rains or irrigation. It requires minimum labour for crop cultivation. The 'Karail' soil is dark in colour and it closely resembles the 'mar' or 'black cotton soil' of Bundelkhand and central Indian regions.

Another important soil noticed in the eastern part of the Saryupar region is the "Bhat" which covers a large area in the Gandak valley. The 'Bhat' is also an alluvial soil. But because of its unique character it needs special treatment. It consists of the alluvium brought down by Gandak river and its tributaries. Its distinguishing feature is a noticeable whiteness which is due to the unusual proportion of lime in the soil. It contains as high as 20 to 30 percent of lime. The peculiarities of the 'Bhat' are many and in a large measure it determines the special characteristics of the topography and the agriculture in this tract. High percentage of lime in the soil proves an asset for growing high quality of sugarcane, for which this region has become famous. This soil is extremely retentive of moisture so the artificial irrigation is not needed. The friable nature of the 'bhat' makes the construction of wells extremely difficult in this soil. The walls of the houses made of this soil can not stand the effects of climate and so they are made of wattle and have thatched roofs locally known as 'chhapar'. It is owing to this fact that the word 'chhapra' occurs frequently in the names of the villages found in those parts and the adjoining subregions.

The southern uplands are noted for several grades of residual soils, depending on the nature of parent rocks, topography and the water action. These soils vary with the rocks underlying them. They are generally stiff and have mixture of shallow red clay which is highly ferruginous. They are believed to have been derived from the crystalline metamorphic rocks such as granites, gneisses, schists and other such rocks which are rich in ferromagnesium. Little can be produced in this soil as it gives very low yield of crops cultivated even after two intervening fallows. In a narrow but fertile strip found at the foot of Kaimurs, there are areas of excellent loam and clay soils, similar to those seen in the Ganga valley or of a fine black nature resembling 'Karail soil'.

Between the plateau region and the north bank of the Sone valley, there intervenes a 10 km wide stretch of land having light sandy alluvial soils. Above this level one finds scanty cultivation which depends on the nature of bold stiff clays or loose sandy loams according to the elevation of these patches. The Singrauli basin is covered with a rich black loam overlying the well known drift of Talchir series which comes to the surface only in the higher portions of the basin. No 'usar tract' is noticed on the Vindhyan uplands or even in the Ganga plain (except at few places). However, in Bhadohi pargana of Varanasi District, reh efflorescence is extensively found in abundance, which is retracted from the earth in many parts of this tract. Lunari village near Bhadohi is still known as a 'salt village' because it was a seat of an extensive salt

EASTERN UTTAR PRADESH SOILS



FIGNO. 7

manufacturing in the past.

It is a difficult task to describe the soil pattern of Eastern Uttar Pradesh in an accurate, comprehensive and reasonably detailed manner because the soils of this region are extensively varied. However, the soil types do not ordinarily change abruptly from one pattern to the other. Rather they change by continuous gradation and so their boundary lines can be drawn on a map (Fig.7) only through zones of transition. The following zonal pattern of the soils may, however, be recognised in the whole region of Eastern Uttar Pradesh on the basis of mineral composition, texture, and many other significant factors: (i) The Marshy soils of Tarai; (ii) The Dry steppe type older alluvial soils; (iii) The Meadow type older alluvial soils; (iv) The Newer Alluvial soils; (v) The Red soils (less leached); and (vi) The Medium Light Red soils. These terms denote the natural classification of these soils and they are perhaps not commonly used as conventional names for their categories.

The soil is a dynamic and continuously changing material. Although it is true that the bulk of most of the soils is made up of minerals, yet the presence of organism and the vegetative matter makes the soil suitable for a good cropping. Therefore, besides the general classification of soils, the experienced farmers have divided them into a large number of classes based on their physical characteristics or productivity or sometimes on their relative proximity from their village sites. Among the farmers a very popular method of classifying the soils of the cultivated areas is based on their varying fertility, from

near the site of their village outwards. There are three well known categories of soils found around the homestead of a farmer. They are (i) The Goind - a term applied to the soils of the highly cultivated and well manured areas adjacent to the rural dwellings, sometimes in close surrounding of the homestead of a farmer. It has a high percentage of organic matter and is very fertile. It is also known locally under various names such as Ganhan, Bara, Kachiana or Guhla. At certain places it is also called 'Kola' or 'Kolia', (ii) The Manjhar - the term is applied for the middle zone soils, sometimes also called as 'Miana' which generally comprises the bulk of the cultivated land of a village, regularly cropped and receiving as much manure as could be given by the farmer. This intermediate zone soil is also known as 'Madhim' or 'Seota' at many places; and (iii) The Palo - this term is applied for the soils of distant fields in which cultivation is more or less casual and which receives little or practically no manures. It is also known as 'Bhuda' or 'Kasina' in some areas.

Soil is the life-blood of agriculture and hence it is vital for a good cropping and better prosperity of the farmer and ^{the} country. An agrarian region like Eastern Uttar Pradesh can not afford to ignore its care and nourishment because the agriculture, the most dominant economic sector of the region is dependent on it. It is also closely associated with the activities allied to agriculture e.g. the industries based on agricultural raw materials such as sugarcane, oil seeds, cotton etc. and the village handicrafts.

REFERENCES

1. Wadia, D.N. "Geology of India", Third Edition, 1953, p.55. See also Pascoe, E.H. "The Indo-Brahma", Quarterly Journal of Geological Society", 1919, Volume LXXX, pp. 138-155.
2. Narain Hari "Airborne Magnetic Surveys". Proceedings of Seminar on Earth Sciences, Part I - Geophysics, the Indian Geophysical Union" (Hyderabad 1965).
3. Singh, L.R. "The Tarai Region of U.P. - A study in Human Geography", Ed. 1965, p.4.
4. Singh, R.L. "Eastern Uttar Pradesh" India: Regional Studies, Ed. 1965, p.62.
5. Singh, L.R. "The Tarai Region of Uttar Pradesh - A study in Human Geography", Ed. 1965, Chapter - Surface configuration and Drainage, p.7.
6. Miller, A. Austin, "Climatology", Ed. 1957 (London and New York), p.152.
7. District Gazetteer: Varanasi, Ed. 1965, p.16.
8. Stamp, L.D. "Africa: A study in Tropical Development", London, Ed. 1953, p.62.
9. Leather. Memoirs, Department of Agriculture; India, 'Chemical series, Volume I, No.8, p.161; Also see Dayal, R. Impact of climate on yields; Agricultural Stations in India, XIV, 81, Nov. 1959, p.852.
10. Blanford, H.F. 'The climates and Weather of India, Ceylon and Burma', London, Ed. 1889, p.67.
11. Naqvi, S.M. "Coefficient of variability of Monsoon Rainfall in India and Pakistan", Geographic Review, Vol.IV, No.2, 1949, pp. 7-17.
12. Shanker Narain, D. "Nature of Frequency Distribution of Precipitation in India during the Monsoon months, 'June to September, 'Indian Meteorological Department; Scientific Notes, Vol.V (No.66, Delhi 1955), pp. 97-107.
13. Davis, D.H. "The Earth and Man", Ed. 1957, Chapter XXXIV 'Forests and the forest industries', p.463.
14. Agrawal, R.R. and Mehrotra, C.L. "Soil Survey and soil work in Uttar Pradesh", 1952, p.41.
15. Singh, R.L. and Singh, K.N. "India", Ed. 1974, Regional Studies, p.17.

CHAPTER III

THE HUMAN BASE AND GEONOMIC FOUNDATIONS

CHAPTER IIITHE HUMAN BASE AND GEONOMIC FOUNDATIONS(A) THE HUMAN BASE3.A1. General:

The significant elements of physical background of Eastern Uttar Pradesh analysed so far have a cumulative effect on man; the most important geographic agent, and on his spatio-temporal distribution and its areal variations in the region. The geographical background, particularly the physiographic features such as those found in few packets of the Saryupar sub-region and in the Southern Uplands, explain clearly the regional disparity in the distribution of population and the location of settlements. Because of the greater carrying capacity of the fertile soils, the region maintains a high density of 387 persons per km² based on basically agricultural economy. Therefore, in light of the above facts, it is imperative to present an analytical discussion of some of the aspects of population of this region.

3.A2. Historical Background:

Little of a specific nature is known concerning the population of this region and its individual parts of more than a few centuries. Practically nothing is known in detail of the early history of this region in this respect. But scattered ruins, mounds, fragmentary remains and historical

documents and records submit an unfailing testimony of the fact that Eastern Uttar Pradesh has been a region of ancient settlements. This region appears to have been occupied by human settlements even in the pre-historic times because researches have shown that man had established in this area since times immemorial in widely separated localities. Equipped with fire and fashioning tools, and his rudimentary industries, he made modifications on the face of this region. The paleolithic hunter and the earliest neolithic agriculturist destroyed certain species of animals and plants and favoured others which suited their purpose. This is how they effected changes on the surface of this region.

"Fifteen thousand years ago, man in this region was in paleolithic age, with nomadic way of life. Civilisation based on rudimentary agriculture and crude metal working dates back to about 10,000 years".¹ "Even as late as 3500-2500 B.C. man eked out a precarious existence---- and there was hardly any trade in essential commodities. Indeed there was no surplus; man lived on the edge of needs".² Further "the Aryans found non-Aryans in full blaze of civilisation in the middle Ganga valley where they advanced fully as much as by alliance and voluntary submission of inhabitants as by the conquest".³ During the Aryan influence the pace of colonisation was further accelerated with many villages and towns dotting the landscape. Kashi (near Varanasi) and Ayodhya (near Faizabad) situated on the banks of Ganga and Ghaghra rivers respectively emerged as two greatest cultural and political centres during that period.

In (Budhā period, the region was divided into a number of kingdoms like those of Kashi, Koshal and Kushinara. With the liquidation of Gupta Dynasty and particularly after Harsh-Vardhan, the region witnessed a period of sordid political confusion and during pre-Mughal period the local Rajputs and clan chiefs continued to hold the region within their jurisdiction as independent or semi-independent sovereigns. "These clan centres emerged as natural functional centres of local defence, higher skill of arts and crafts, and trade and commerce".⁴ The region came under the Mughal empire during the regime of Akbar and in the late mediaeval period, the eastern Districts of Varanasi division came under the famous Benaras Raj. The region was annexed to the British Empire in 1856 with the fall of the Nawab of Oudh.

The first attempt at having a census in Eastern Uttar Pradesh dates back to 1847 which was repeated in 1853 and 1865. The first proper census was, however, taken in 1871 which was subsequently repeated in 1881 and 1891. The records of these early censuses are so scanty, unreliable and scattered that any effort to collect the full population data for the entire region and thereby to draw definite conclusions seems entirely difficult, rather impossible.

With the beginning of the current century, censuses were taken on new pattern with more information and hence 1901 can be selected as a base year for the sake of this study. This is also possible because most of the old records for 1901

and subsequent censuses are available from which necessary conclusions can easily be drawn (Table III-1).

3.A3. Dynamics of Population Growth Since 1901:

Eastern Uttar Pradesh with 31.25 million people in 1971, had an average density of 387 persons per square kilometre ~~and~~ registered a population growth of 78.75 percent between 1901 and 1971, while this figure for this State as a whole was 81.73 percent. It may be inferred from table III-1 that the growth of population has followed a three-phased course: the first phase of progressive decline was in line with the all India pattern during 1901-21; followed by the second phase of steady growth rate during 1921-51; and by the third phase of accelerated growth-rate from 1951 onwards. These facts can be better explained by examining the decennial growth rate of population from 1901 onwards.

The decade 1901-11 proved fatal for this region as it recorded an unprecedented decrease in population. Its population was reduced from 18,566,567 to 18,461,748 recording the decennial fall of 104,819 persons or intercensal loss by 1.41 percent against 0.97 percent loss for entire U.P. but against 5.73 percent increase for whole India. The situation was, however, not the same every where because the Districts of Gorakhpur, Deoria, and Gonda lying north of river Ghaghra showed an upward trend of population, recording a gain of 8.97, 8.90 and 0.64 percents respectively. On the contrary the areas of this region in the Ganga plain and in the southern

uplands, which were infested by climatic hazards and epidemics, had an appreciable fall in their population e.g. Ballia by 14.32%, Ghazipur by 8.11%, Faizabad by 5.81%, Jaunpur by 3.86%, Azamgarh by 3.58% and Sultanpur by 3.27%. The Districts of Pratapgarh, Allahabad* and Mirzapur were not so much affected and, therefore, they suffered only marginal loss of population by 1.41, 1.56 and 1.05 percents respectively (Table III-1 column 2).

The decade 1911-21, owing to the outbreak of influenza epidemic, failure of monsoon rains and World War I, could not witness high population growth rate for this region which recorded only a marginal decennial increase of 0.75 percent in contrast to a net loss of 3.08 percent in case of whole U.P. and a loss of 0.31 percent in case of India. The Districts of Pratapgarh, Allahabad, Sultanpur, Ballia, Ghazipur, Jaunpur and Mirzapur lying in the Ganga-Ghaghra Doab and the southern uplands recorded a fall of 4.97, 4.57, 4.21, 1.75, 0.88, 0.14 and 0.08 percents respectively; whereas the Districts of Azamgarh and Varanasi made slight gains, recording an increase of 2.40 and 1.58 percents respectively. Other Districts of the region like Basti, Gonda, Deoria, Gorakhpur and Bahraich had a moderate growth rate between 1.67 to 5.18 percent. This was mainly because of the fact that general economic conditions were slightly better in the northern part of the region than

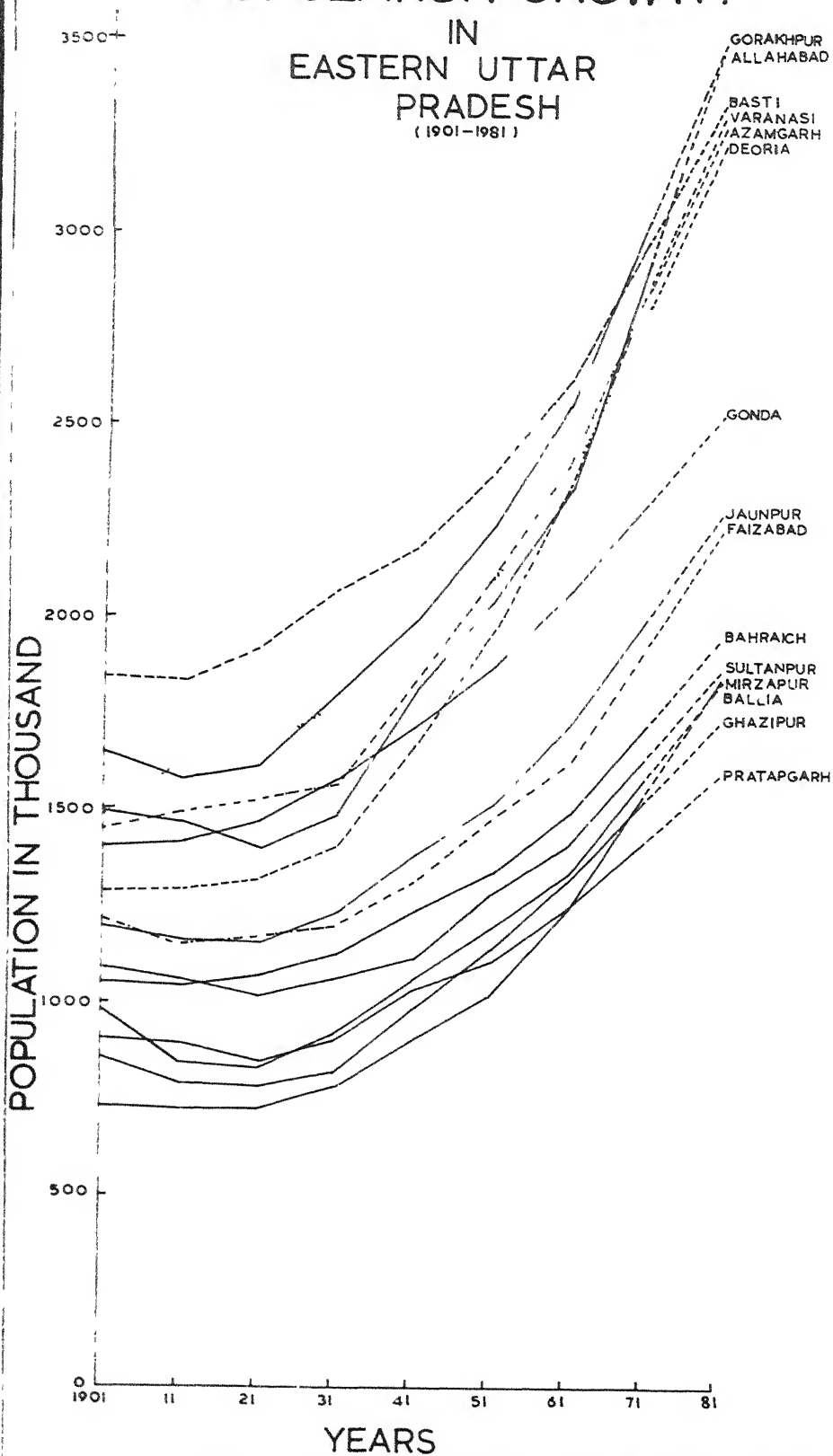
* Allahabad includes the entire district of Allahabad, whereas only three tahsils (Phulpur, Soraon and Handia) form the part of Eastern Uttar Pradesh.

in the Ganga-Ghaghra Doab and the southern uplands. The year 1921 may be treated as a 'big divide' in the population history of the region, because henceforth an upward trend was noticed in its population growth (Fig.8).

The period 1921-31 proved beneficial and brought a moderate growth rate to this region. Its population increased by 1,251,755 persons, the gain amounting to 6.76 percent against the decennial growth rate of whole U.P. and India as 6.66 and 11.01 percents respectively. This upward trend was possible due to the fact that the nature relatively favoured it as general economic and health conditions had improved. A large increase was recorded in case of Gorakhpur, Ballia and Mirzapur Districts with a decennial gain of 11.69, 9.88 and 8.87 percents respectively. Of other Districts, Basti, Jaunpur, Varanasi, Gonda, Deoria, Bahraich and Allahabad had moderate growth rates lying between 6.20 to 7.94 percent, whereas Pratapgarh, Ghazipur, Sultanpur, Azamgarh and Faizabad recorded low (less than 6 percent) growth rates (Table III-1, column 4).

The decade 1931-41 proved brighter for the region and it augmented an increase of 12.39 percent in its population as against 13.57% and 14.23% increase in case of whole U.P. and India respectively. This accelerated growth rate was mainly due to the declining trend in death rate. An unprecedented increase was observed in case of Allahabad where the decennial growth rate rose upto 21.46 percent followed by the Districts of Ghazipur, Varanasi, Azamgarh, Ballia, Pratapgarh, and Mirzapur (each having the growth rate more than 14 percent).

POPULATION GROWTH IN EASTERN UTTAR PRADESH (1901-1981)



FIGNO 8

The Districts of Deoria, Gorakhpur, Bahraich, Gonda and Basti lying in the sub-region north of Ghaghra had comparatively slower growth rate (below 12 percent). Similar tendencies were observed in case of some of the districts of the Ganga Plain also e.g. in case of Faizabad 9.52% and in case of Sultanpur 4.75%. This marked contrast in the growth rate between northern and southern parts of the region was mainly due to the slightly better hygienic and climatic conditions in the southern plain of this region.

The period 1941-51, although with numerous obstacles, saw an upward trend in population but at a comparatively lower rate. It increased by 2,625,059 persons, the gain amounting to 11.84 percent as against those of whole U.P. and India 11.82% and 13.31 percent respectively. The phenomenal increase was recorded in the Districts of Varanasi (18.48%), Sultanpur (16.44%), Ghazipur (15.82%), Azamgarh (15.33%), Ballia (13.36%), Mirzapur (13.04%), Allahabad (13.03%), Faizabad (12.31%) and Gorakhpur (12.29%). On the contrary, the Districts of Jaunpur, Basti, Gonda, Bahraich, Pratapgarh and Deoria recorded an average decennial increase of 9.35, 9.24, 9.18, 8.53, 6.78 and 6.74 percents respectively. The post-independence period observed a "big spurt in the population growth rate, which has certainly been the effect of better health conditions and effective control of epidemics and also efficient handling of famine situation".⁵

During 1951-61 the region presented a slightly better picture in population growth. Its population increased from

24,824,356 to 28,281,988, accounting for a decennial growth of 13.89 percent which was much lower than the whole state of Uttar Pradesh (16.66%) and of India (21.50%). This was mainly because this region remained underdeveloped and better economic situations did not prevail so as to accelerate the growth rate of population. The District of Mirzapur was the only exception where due to better industrial prospects and consequent immigration of skilled and semi-skilled labourers from the neighbouring areas, the percentage of decennial growth rate was comparatively higher (22.79%). Among the other Districts having a growth rate higher than the regional average, mention may be made of Varanasi (19.45%), Allahabad (19.29%), Ghazipur (15.83%), Gorakhpur (14.59%), Azamgarh (14.31%), and Jaunpur (14.01%).

The decade 1961-71 recorded an unprecedented decennial growth rate of population in India (24.80 percent), in whole U.P. (19.82%) and in this region (17.31%). This faster trend was mainly due to the phased economic programmes launched during the Five Year Plans and the improvements in sanitary and health conditions which had their impacts in reducing the death rate considerably. However, Eastern U.P. owing to its inherent weaknesses, could not make a major breakthrough in these programmes and so its growth rate of population lagged far behind than the State and national averages. As regards the inter district variation in the growth rate within the region, the District of Mirzapur had the credit of recording the highest percentage (23.71%), followed by Allahabad (20.49%).

Table III-1

Variation of Population in Eastern Uttar Pradesh (1901-71)

District	1901-11	11-21	21-31	31-41	41-51	51-61	61-71	Net increase 1901-71	Total population 1971	Annual rate of increase	Variation index per cent
Bahraich	-0.37	1.67	6.66	9.17	8.53	11.63	15.23	65.46	1726972	0.72	11.5
Gonda	0.64	4.31	6.96	9.11	9.18	10.43	11.53	64.13	2302029	0.72	8.3
Faizabad	-5.81	1.54	2.80	9.52	12.31	10.54	18.03	57.79	1927281	0.66	16.5
Sultanpur	-3.27	-4.21	4.74	4.75	16.44	9.28	16.22	50.34	1642928	0.61	14.0
Pratapgarh	-1.41	-4.97	5.98	14.96	6.78	13.14	13.78	56.89	1422707	0.65	13.4
Basti	-0.82	5.18	7.94	5.18	9.24	10.03	13.64	61.63	2984090	0.69	9.5
Gorakhpur	8.97	2.02	11.69	10.67	12.29	14.59	18.43	100.94	3038177	1.01	12.0
Deoria	8.90	2.08	6.78	11.53	6.74	12.96	18.53	89.21	2812350	0.91	9.5
Azamgarh	-3.58	2.40	2.81	15.98	15.33	14.31	19.03	84.72	2857484	0.91	16.7
Jaunpur	-3.86	-0.14	7.00	12.24	9.35	14.01	15.96	58.35	2005434	0.68	15.6
Ballia	-14.32	-1.75	9.88	15.45	13.36	11.79	18.72	70.86	1588935	0.70	22.3
Ghazipur	-8.11	-0.88	5.55	19.44	15.82	15.83	17.31	80.65	1531654	0.81	23.2
Varanasi	0.52	1.58	7.05	18.64	18.48	19.45	19.66	118.30	2852459	1.10	19.3
Mirzapur	-1.05	-0.08	8.87	14.15	13.04	22.79	23.71	110.51	1541088	1.06	23.3
Allahabad*	-1.56	-4.57	6.20	21.46	13.03	19.29	20.49	97.44	2937278	0.93	22.6
Eastern U.P.	-1.41	0.75	6.76	12.39	11.84	13.89	17.31	78.75	33170866	0.80	17.64
Uttar Pradesh	-0.97	-3.08	6.66	13.57	11.82	16.66	19.82	81.73	88341144	0.81	17.92
	5.73	-0.31	11.01	14.23	13.31	21.50	24.80	131.66	547949809	1.20	17.52

Source: Calculations are based on the 'Census of India' 1901, 11, 21, 31, 41, 51, 61 and 1971.

* Allahabad means the entire District.

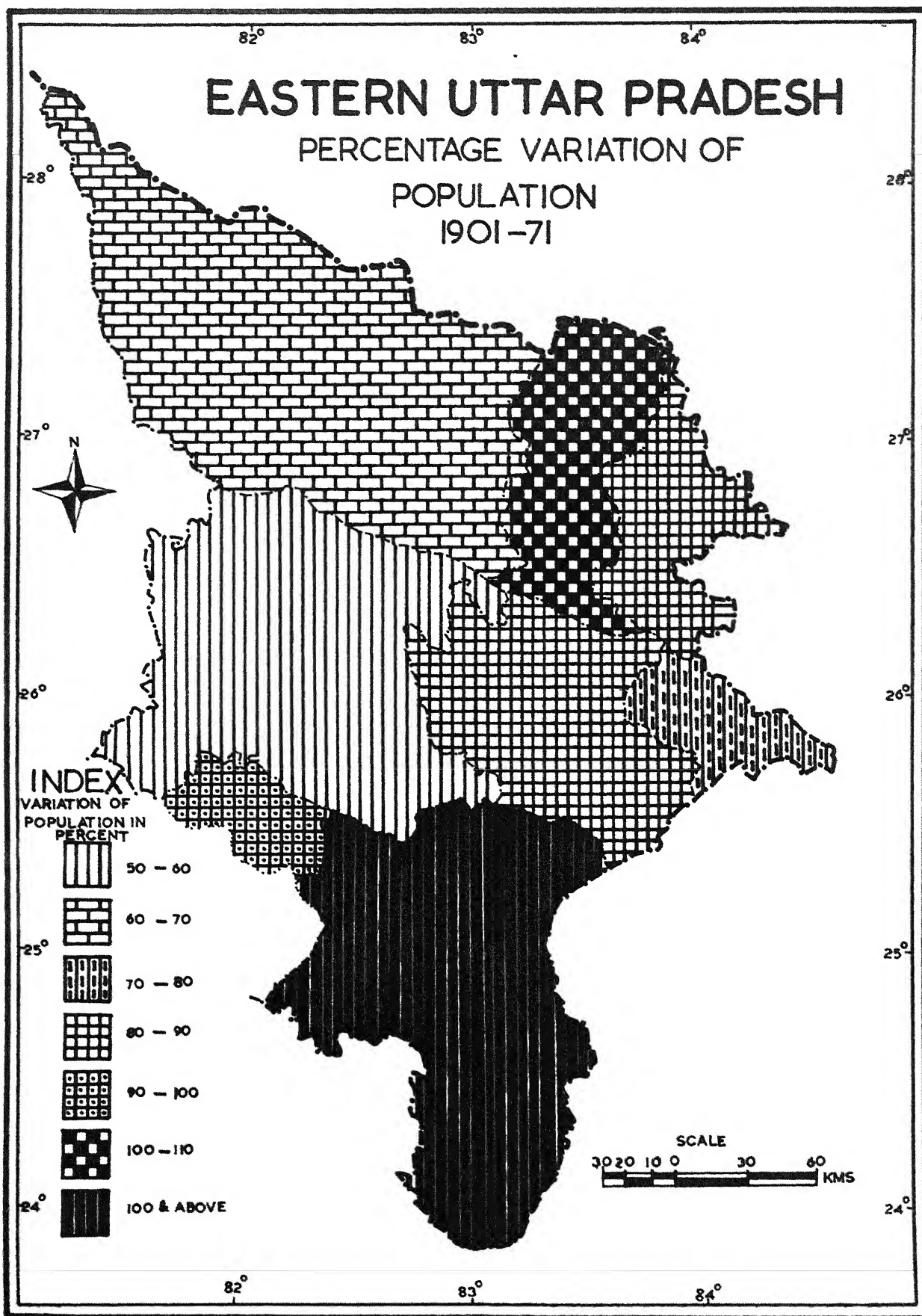


FIG.NO. 9

Varanasi (19.66%), Azamgarh (19.03%), Ballia (18.72%), Deoria (18.53%), Gorakhpur (18.53%) and Faizabad (18.03%). Other districts of the region had lower growth rates than the regional average.

3.A4. Variation of population:

On the basis of foregoing discussions, it is evident that the population of Eastern Uttar Pradesh rose up from 18.6 millions to 33.17* millions during 1901-71, recording a net gain of 78.75 percent which is, however, lower than the state of Uttar Pradesh (81.73%) and India (131.66%). At sub-regional levels the net increase of population shows wide variations in the districts. While as many as seven Districts of Varanasi, Mirzapur, Gorakhpur, Allahabad, Deoria, Azamgarh and Ghazipur recorded the higher percentage increase than the region, the remaining eight districts lagged behind. This fact can be further elaborated with the help of Fig.9 which depicts wide fluctuations in the percentages of net increase of population ranging between 50.34 to 118.30 percent (Table III-1).

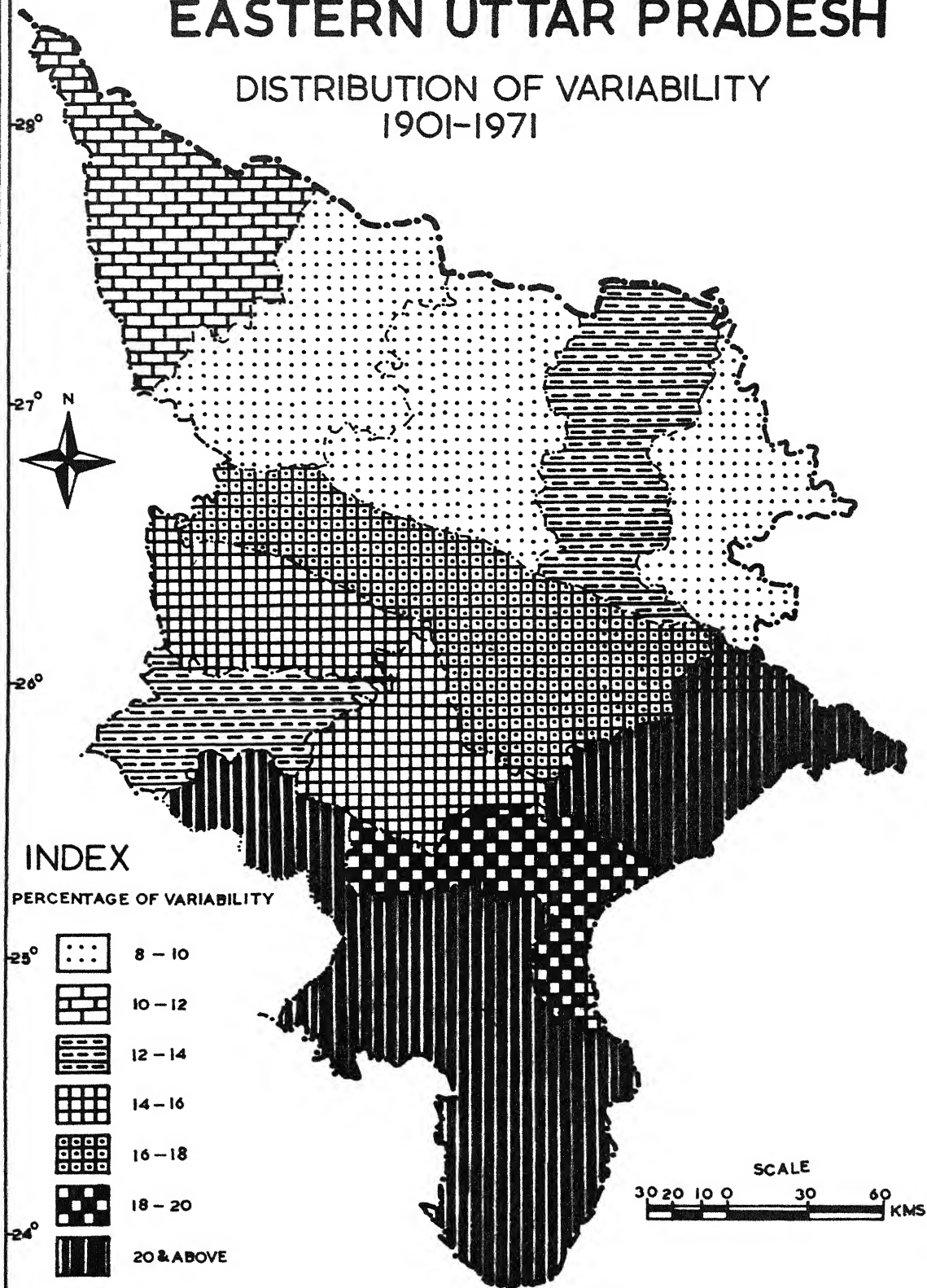
3.A5. Variability:

Another useful method of assessing the nature of growth of population of a region is its variability which is "particularly valuable in comparing conditions in two or more districts subject to violent fluctuations".⁶ Fig.10 and Table III-1 show the variability indices in percent for various

* Entire Allahabad District.

EASTERN UTTAR PRADESH

DISTRIBUTION OF VARIABILITY
1901-1971



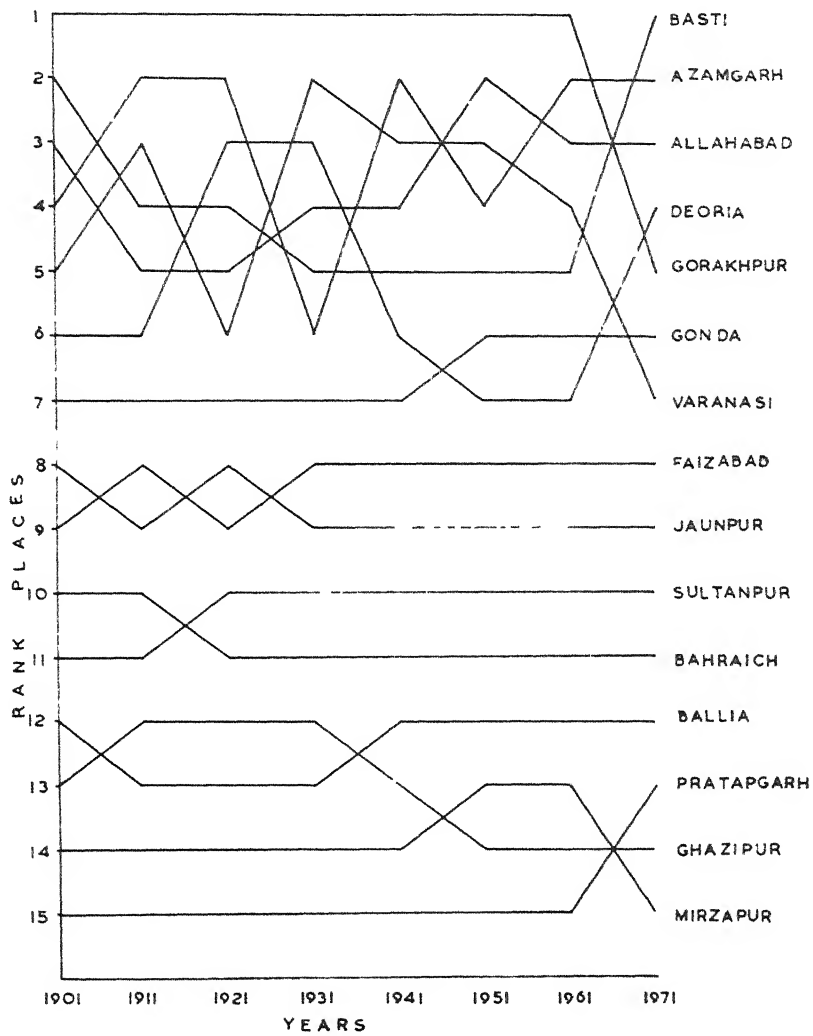
FIGNO.10

districts of the region calculated on the basis of the method suggested by A. Geddes⁷. The region has a variability index of 17.64 percent which is quite nearer to the state of U.P. (17.92%) The highest percentage of variability is noticed in Mirzapur (23.3%), closely followed by Ghazipur (23.2%), Allahabad (22.6%), and Ballia (22.3%). This is partly due to the droughts, famines, epidemics and periodic exodus in the early periods and partly due to the improvements in agriculture, irrigation and general economic and health conditions during the post-independence period. On the contrary, the lowest percentage of variability index is noted in Gonda District (8.3%) followed by the districts of Basti and Deoria (9.5%), Bahraich (11.5%) and Gorakhpur (12.0%). This is due to slightly better conditions in the trans-Ghaghra tract of the region during the early days followed by the slower growth rate during the recent past.

3.A6. Rank Places of the Districts:

The rank places of the districts of the study area according to their population size at various censuses, is better illustrated by Fig.10 which clearly demonstrated that the trend of population growth has varied considerably both in time and place. So much so that even the rank places of the districts have inter-changed quite frequently Fig.11. It is surprising to note that none of the districts of the region could maintain its original rank-place of 1901 census except those of Allahabad and Ballia. But they too have changed

RANK PLACES OF DISTRICTS SINCE 1901



FIGNO. II

their ranks many times during the last seventy years under various censuses. This has been mainly due to the uneven growth rate in different parts of the region during the past.

3.A7. Annual Rate of Increases of Population:

An idea about the growth of population in the region can also be formed on the basis of annual rate of increase calculated according to the following formula:

$$P_1 = P_0 \left(\frac{1+r}{100} \right)^n$$

where r is the annual rate of increase of population,

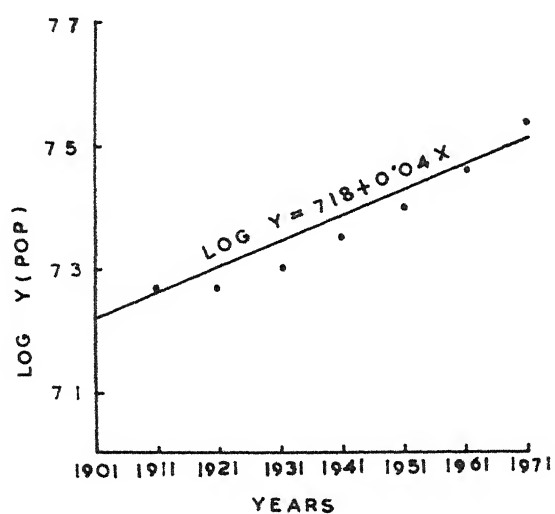
P_1 is the population of 1971,

P_0 is the population of 1901, and

n is the number of years i.e. 70 (1901-71).

The annual rate of increase of population in percent as shown in the Table III-1 varies considerably ranging between 0.61 (Sultanpur) and 1.10 (Varanasi) during 1901-71. The region, on the whole, has an annual average rate of increase of population by 0.80 percent against that of whole U.P. by 0.81% and India by 1.2%. None of the districts of the study region records higher percentage than India, though the Districts of Varanasi, Mirzapur, Gorakhpur, Allahabad, Azamgarh, Deoria and Ghazipur excel the regional and State averages. This was due to the improved methods of farming and general improvements in economic, sanitary and health conditions in these areas. Other districts of the region have lower percentage of annual

POPULATION SIZE AND TIME RELATIONSHIP
IN
EASTERN UTTAR PRADESH



FIGNO 12

0.72% (Bahraich).

3.A8. Population Size and Time Relationships:

In order to discover the relationship between population size (expressed in terms of number of people) and time (census years 1901, 1911..... etc.) the data in question was subjected to correlation and regression analysis (Fig.12). An exponential function of the form, $\log y = a + bx$, fitted to the data, because the scattered dots on the dot-chart clearly confirmed the possibility of the aforesaid function. The line of 'best fit' was formed by the equation $\log y = 7.18 + 0.04 x$. The coefficient of correlation ($r = +0.96$) indicated a positive relationship of a high order between the two variables under consideration (x for years and y for population number), and confirmed the view that time had an effective influence on the evolution of population size. The coefficient of determination ($R^2 = 92\%$) indicated that the 'time' factor had a remarkable explanatory power, in respect of population growth, so that 92 percent of variation in population size over time was accounted for by time itself.

The standard error of estimate ($S = 0.034$) indicates that there does exist statistical reliability in estimating population on the basis of change in time.

3.A9. Population Trends:

Planners and policy makers are interested in knowing the future size and the rate of growth of population to make

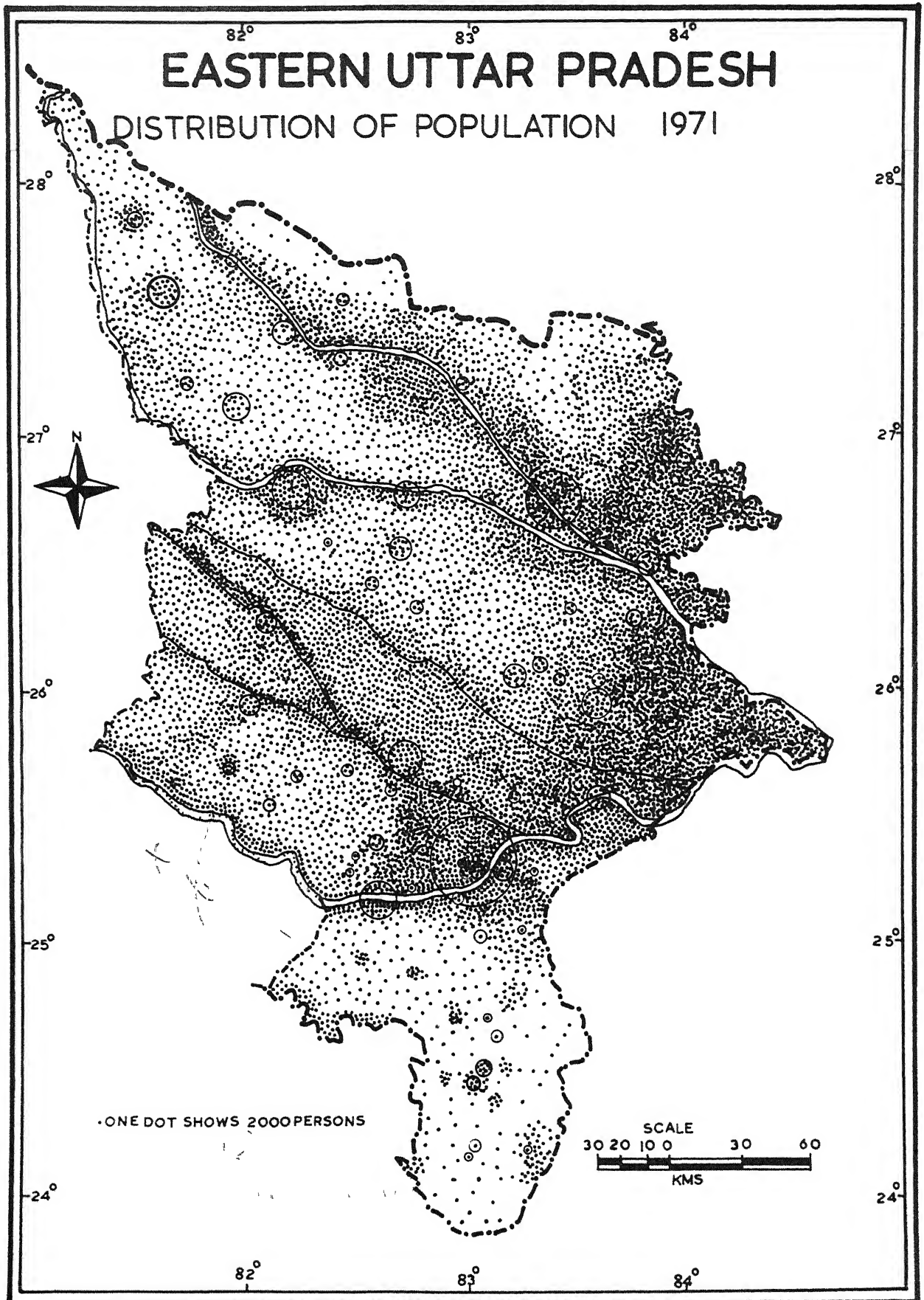
realistic targets for economic and social developments of the region. This is especially important in case of Eastern Uttar Pradesh which is regarded as a demographically saturated, poverty stricken region endowed with limited natural resources. It is presumed that on the basis of the existing rate of growth (1.73 percent per annum during 1961-71) the population of Eastern U.P. is expected to reach up to 38.9 millions by 1981, showing a net gain of 5.7 millions over the previous decade. But as is the case with most of the population forecasts, the assumptions may not hold true owing to the accelerated growth rate observed in recent years particularly because of new economic programmes and improved sanitary and health conditions, giving place to greater survival and longevity amongst the people. This region uptill now has witnessed slower growth rate of population in comparison to the whole state of Uttar Pradesh and India, but it may experience big gains in coming years due to increasing industrialisation which is being carried out all over the region, because industrialisation in its early phase leads to sharp rise in population growth rate.

However, no definite conclusion regarding the growth of population in the region may be drawn owing to the non-availability of reliable data on migration of population. The past observations have shown that the backwardness of the region has promoted out-migration in sizable numbers, especially to the metropolitan cities like Calcutta and Bombay. ^{Simultaneously} The growth of industrialisation and better economic prospects may

exercise a curb on this tendency and may, therefore, accentuate the growth rate of population in this region in the near future. "The need of the hour, therefore, is to propagate family welfare measures to arrest growth rate, so that gains of new economic reforms may not be lost".⁸ The government and social organisations will have tough job in propagating family welfare programmes, especially amongst weaker sections and economically depressed classes of the society, where these are so badly needed; for Eastern U.P. is a traditional hard core of the country where people do not want to shed away their age-old beliefs and customs and where superstitions still reign supreme. It is hoped that the region will enter into new era of prosperity and progress under the recent economic drives launched by the government. However, now it is in the fitness of ~~the~~ things to analyse the present distribution of population.

3.A10. Distribution of Population:

General distribution of population shows the supporting capacity of the individual areas of a region. Certainly a region like Eastern Uttar Pradesh needs a detailed study because minor variations in its environmental conditions play a significant role in influencing the distributional pattern of its population. Numerous anomalies arise when one starts analysing and generalising the governing factors over this region in respect of the pattern of distribution of population. Some of these anomalies indicate that the present distribution of human



beings is merely a temporary phase as result of certain complex factors and is under gradual change. "The present distribution of population with its anomalies and peculiarities, is only one stage of a continually altering pattern; the present distribution of population is not that of the past, nor it will be that of the future".⁹

"The over-all distribution of population, excepting a few packets of the Tarai land and the southern uplands, is even. However, the details show the varying and intricate trends of unevenness affecting the overall suitability of homogeneously diffused habitability conditions; and the diversity of small facets of terrain, fertility of soil, drainage conditions, tapability of underground water resources through wells and borings which indicate the extent and possibility of resource utilisation".¹⁰

At subregional levels, the population of Eastern Uttar Pradesh is highly unevenly distributed, the picture is more of a mosaic than of a uniform tone. The middle-Ganga plain has almost uniformly a dense population because of its even surface, fertile soils, good drainage and comparatively healthy climatic conditions. But in this subregion also the distributional pattern is not exactly the same every where because of minor variations in the environmental conditions. Fig.13 very much explains the uneven distribution of population of Eastern Uttar Pradesh.

As we move from east to west and to north-west, the dots are sparsely spaced there, whereas they are closely spaced in its eastern part. The scattered but heavily dotted areas indicate the location of urban centres. The present distribution of population is essentially provisional and is subject to change and adjustments in the days to come. Because "this distribution is only a stage, not even a stable one, in an evolution whose progress we can not at present altogether understand".¹¹ Such difficult and intricate is the task of explaining the governing factors underlying the present distributional pattern of population in the region. These distributional aspects are in fact inseparable from the density of population indicating that there are more in some places leading to relatively higher density and fewer in others leading to low density.

3.A11. Population Density:

The population density of a region indicates the relationship that exists between the number of inhabitants and the area of that region. Man and land ratio gives us the arithmetic density of population.

Eastern Uttar Pradesh maintaining an average density of 387 persons per square km is a region of dense population. However, the uneven distribution of population in the region indicates a marked regional variation at the district level (Table III-2). The lowest density is recorded by the District of Mirzapur (114 person per km²) followed by the Districts of

Bahraich (251), Gonda (314), Sultanpur (374); and Pratapgarh (382). These five districts maintain a lower density of population per km² than the average density of entire Eastern Uttar Pradesh. The Districts of Allahabad, Basti, Faizabad, Gorakhpur, Ghazipur, Jaunpur, Azamgarh and Ballia with their densities as 405, 408, 436, 481, 483, 496, 497 and 499 persons per square km respectively maintain a higher density of population than the average density of the region as a whole ^{but} in each case below 500 persons per square km. The District of Varanasi with a density of 563 persons per square km records the highest of the region and the District Deoria with a density of 528 persons per square km stands second. Regional variations of density at the district level speaks of the resources and the supporting capacity of individual districts. The low density reflects the poor resources due to the forested or usar or barren lands or due to the topography, unhealthy climatic conditions and numerous other factors. This is, why the regional density patterns show marked diversities.

These variations have greater magnitude when we try to analyse the density pattern of small area say at tahsil level (Table III-2). Dudhi tahsil of Mirzapur District with a density of 55 persons per square km ranks lowest in the whole region followed by the tahsils of Robertsganj (102) of the same District and Chakia (132) of Varanasi District. The Varanasi tahsil of Varanasi District records the maximum density of population (989 persons per square km) in the whole region because of the location of the densely populated city

Table III-2

Densities of Population in the Districts and Tahsils of Eastern
Uttar Pradesh - 1971

Name of the district with density	Name of tahsils	Density per km ²	Name of the district with density	Name of tahsils	Density per km ²
1. Bahraich (251)	a. Nanpara	207	2. Pratapgarh (382)	a. Bela	432
	b. Kaiserganj	289		b. Patti	370
	c. Bahraich	270		c. Kunda	364
3. Gonda (314)	a. Gonda	364	4. Gorakhpur (481)	a. Gorakhpur	675
	b. Balrampur	230		b. Pharenda	338
	c. Utraula	379		c. Mahrajganj	385
	d. Tarabganj	308		d. Bansgaon	504
5. Faizabad (436)	a. Faizabad	529	6. Deoria (528)	a. Deoria	567
	b. Bikapur	359		b. Hata	468
	c. Akbarpur	426		c. Padrauna	499
	d. Tanda	481		d. Salempur	549
7. Sultanpur (374)	a. Sultanpur	411	8. Ghazipur (483)	a. Ghazipur	518
	b. Musafir-khana	396		b. Mohemmdabad	452
	c. Amethi	256		c. Zamania	411
	d. Kadipur	417		d. Saidpur	447
9. Basti (408)	a. Basti	454	10. Azamgarh (497)	a. Azamgarh	562
	b. Harraiya	365		b. Phulpur	459
	c. Dummariaganj	370		c. Sagari	456
	d. Naugarh	374		d. Ghosi	536
	e. Bansi	404		e. Mohemdabad	579
	f. Khalilabad	462		f. Lalganj	414
11. Jaunpur (486)	a. Jaunpur	644	12. Varanasi (563)	a. Varanasi	989
	b. Shahganj	468		b. Chandauli	463
	c. Machhali-shahar	396		c. Chakia	132
	d. Mariahu	475		d. Gyanpur	576
	e. Kerakat	549			
13. Ballia (499)	a. Ballia	543	14. Mirzapur (114)	a. Mirzapur	179
	b. Bansdih	469		b. Robertsganj	102
	c. Rasra	467		c. Chunar	235
				d. Dudhi	55
15. Allahabad (405)	a. Soroan	486			
	b. Phulpur	440			
	c. Handia	455			

Note: Figures in () indicate the Arithmetic densities of the Districts.

of Varanasi and many other small towns within the limits of this tahsil. The table III-2 shows the densities of the Districts and the tahsils of Eastern Uttar Pradesh as per Census 1971.

Based on the table III-2 six density categories have been recognised and the details are given below.

Sl. No.	Range of Density	Density category
(i)	50 to 150 persons per km ²	Very low density category
(ii)	151 to 250 persons per km ²	Low density category
(iii)	251 to 350 persons per km ²	Moderately low density category
(iv)	351 to 450 persons per km ²	Moderate density category
(v)	451 to 550 persons per km ²	High density category
(vi)	over 551 persons per km ²	Very high density category

An analysis of the population density at tahsil level (Fig.14) reveals significant variation in its pattern. Of the sixty one tahsils of this region, three of all under very low and four under low density categories. Five of them with 251 to 350 persons per square km have moderately low population density, whereas as many as forty two tahsils of them have moderate to high density of population. The remaining seven tahsils are credited with a very high population density in this region. Further analysis of the distribution of density pattern of population of this region can be had from the table III-3.

EASTERN UTTAR PRADESH

DENSITY OF POPULATION

1971

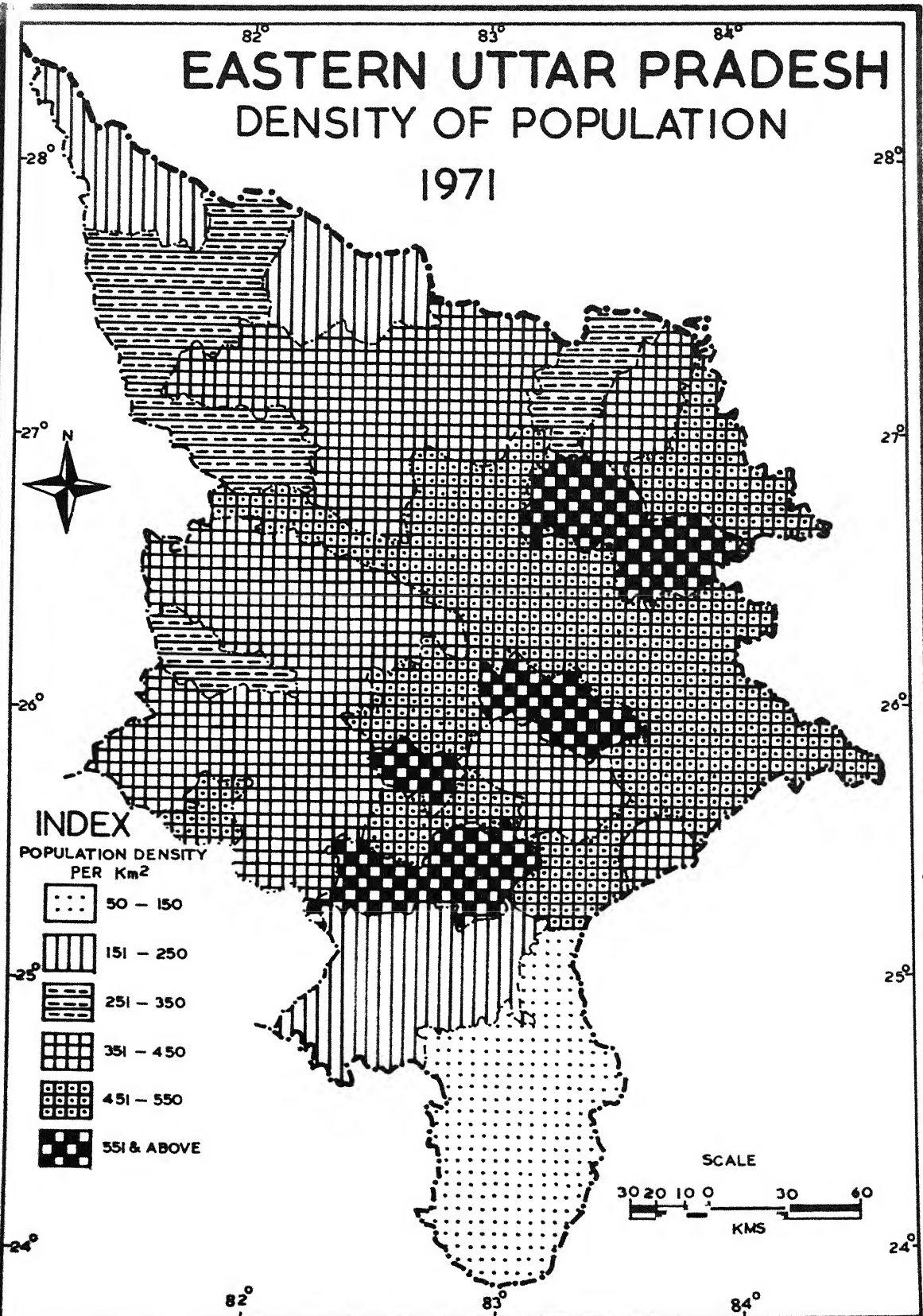


Table III-3

Population Density Categories with their Areas Covered and Population in Eastern Uttar Pradesh - 1971.

Density categories (persons per sq.km)	No. of tahsils included	Area in km ² under the category	Percentage of the total area covered by the category	Total population of the area covered under the category	Percentage of the total population covered by the category
50-150	3	8,450.00	10.45	737,328	02.40
151-250	5	10,161.00	12.60	2,118,191	06.80
251-350	5	8,560.00	10.50	2,500,199	08.00
351-450	20	23,360.00	28.90	9,362,121	29.90
451-550	22	22,190.00	27.60	11,129,928	35.60
Over 550	7	8,040.00	09.95	5,398,822	17.30
Total	61	80,761.00	100.00	31,246,589	100.00

3.A12. Rural-Urban Composition:

The differences between the social structure of the rural and urban community bring contrasts of extreme order between their modes of occupation. The urbanisation brings considerable changes in the occupational pattern of a region when it is transformed from rural to urban. The diversification of economic activities increases with proportionate increase in the size of the city.

3.A13. Rural Population:

The percentage of rural population in Eastern Uttar Pradesh is 92.94 percent, which is dispersed in 47,382 villages.

Table III-4

Distribution of villages and their size in the region of Eastern Uttar Pradesh - 1971

Name of the district/region/ state	No. of vill- ages	Less than 200 persons		200-499 persons		500-999 persons		1000-1999 persons		2000-4999 persons		5000-9999 persons		Above 10,000	
		a	b	a	b	a	b	a	b	a	b	a	b	a	b
1. Bahraich	1884	184	1.3	457	10.0	671	30.3	452	38.0	116	18.5	3	1.2	1	0.7
2. Gonda	2814	288	1.7	852	13.5	977	32.6	575	35.2	111	13.7	11	3.3	-	-
3. Faizabad	2654	485	3.3	905	17.6	746	30.2	415	32.5	100	15.4	3	1.0	-	-
4. Sultanpur	2491	481	3.6	839	17.9	710	30.9	362	30.7	97	16.3	2	0.6	-	-
5. Pratapgarh	2195	401	4.1	800	19.4	600	29.9	312	30.0	81	16.1	1	0.5	-	-
6. Basti	6942	2062	7.9	3127	35.4	1293	30.3	375	17.1	82	8.3	2	0.5	1	0.5
7. Gorakhpur	4092	931	3.2	1255	15.4	1052	26.8	644	30.9	195	19.7	16	3.6	1	0.4
8. Deoria	3559	532	2.1	1109	14.1	1128	29.4	586	29.9	184	18.8	16	3.9	4	1.8
9. Azamgarh	4943	1444	5.3	1638	20.2	1151	29.8	546	26.9	153	15.2	11	2.6	-	-
10. Jaunpur	3228	808	4.4	1033	18.8	864	32.6	426	30.5	95	13.7	-	-	-	-
11. Ballia	1912	547	3.2	528	11.6	389	18.2	284	26.0	135	26.1	19	7.5	10	7.4
12. Ghazipur	2510	821	5.2	804	18.2	519	25.1	256	24.6	95	18.1	10	4.3	5	4.5
13. Varanasi	3647	956	4.3	1173	18.5	920	30.3	480	30.8	115	15.1	3	1.0	-	-
14. Mirzapur	2993	1108	8.1	1036	25.0	522	26.9	264	26.1	58	11.3	5	2.6	-	-
15. Allahabad**	1518	272	2.8	490	16.8	462	32.5	231	31.2	62	16.2	1	0.6	-	-
E.U.P.	47382	11320	4.1	16046	18.6	12004	29.3	6208	29.0	1679	15.9	103	2.2	22	0.9
U.P.	112561	27356	3.7	34856	15.5	28295	26.5	16031	29.0	5400	20.0	515	4.4	58	0.9

* Calculations are based on: Data (1) Census of India 1971 series 21, Uttar Pradesh part II - A General Population Tables, pp. 134-39.

** Allahabad means the tahsils of Saroan, Phulpur and Handia.

a = Number of villages.

b = Percentage of rural population.

This shows the predominantly rural character of the region because the percentage of rural population is quite high. It is more than that of whole U.P. (85.97 percent) and is also much above that of India which is only 80.09 percent). Hence this region having rural personality, supports the rural pattern of life, which is well organised around a large number of small villages, because the rural population is very much attached to them for its sustenance. In this region agriculture is the most important source of livelihood as a high proportion of people living in the villages are either directly engaged in agriculture or indirectly dependent on it. Even in those villages which are dominated by the artisans and the trading castes; the arable land is the ultimate source of prosperity. There is heavy pressure of population on most of the villages of this region.

As high as 94.86 percent of the total population of Eastern Uttar Pradesh was rural as per 1941 census which gradually declined to 94.29 percent in 1951, 93.76 percent in 1961 and 92.94 percent in 1971, indicating a downward trend because of more urbanising trends during this period (1941-71). The changing definition of urban population also contributed much towards the decreasing percentage of rural population, because almost all the swollen villages were treated as 'urban' at earlier censuses, which were disqualified and as such termed as rural in the later census. Although the decennial growth rate of urban population was much higher than the growth rate of rural or total population but because of a

lower percentage of urban population to the total population, it could not influence the rural urban composition substantially.

Of the total rural population of the region, 51 percent lived in villages of less than one thousand population and the rest 48.00 percent in larger villages having more than one thousand population as against 45.20 percent and 54.80 percent of the whole Uttar Pradesh respectively. The large villages having more than five thousand population each numbered 125 only, out of which twenty two villages had more than 10,000 population in each. The spatial distribution of these large villages shows that ten of them are located in the District of Ballia alone followed by Ghazipur with 5, Deoria with 4 and Gorakhpur, Basti, and Bahraich with one such village each. All other districts had no such large swollen villages (Table III-4)

3.A14. Urban Population:

The urban areas have their own special role to play in the development of a region because they have links with the swollen villages having minor urban characteristics on the one hand and their surrounding rural population on the other. A swollen village, which combines the traits of rural-cum-urban complex to some extent is at times described as , "a political organ"; 'a focus of contact; or a nodal point"¹² etc. According to R.E. Dickinson "Every urban settlement forms a part of economic, social, cultural and political whole,

upon which its development depends and all these relations have geographic expressions".¹³ According to Walter Christaller a small area of productive land supports an urban centre, which exists because it performs the essential services for the surrounding land. Hence "there should be cities of varying sizes ranging from small hamlet performing simple functions such as providing a limited shopping and market centre for a small continuous area upto a large city with a large tributary area composed of the service areas of many smaller towns and providing more complex services such as wholesaling and large-scale banking, specialised retailing and the like".¹⁴ Thus the regional distribution of towns reflects the differential pattern of its intra-regional development. The process of urbanisation has, therefore, been recognised as an important aspect of economic and social development.

Urbanisation is an important index of socio-economic structure of a region. The urban centres, besides being nodes of settlements, are the foci of social contacts and economic growth and they perform many other functions also. They do not exist for themselves alone, but in fact they are part of a complex whole and serve the surrounding countryside with which they are spatially and functionally knit together. Eastern Uttar Pradesh as a region has been witnessing remarkable changes in its urban population, particularly since independence. Here an attempt has been made to investigate the changes regarding the origin, growth and distribution of urban centres of Eastern Uttar Pradesh with special reference to their size and numbers.

3.A15. Evolution and Distribution of Towns:

"Eastern Uttar Pradesh has the credit of having the oldest living city of the country, namely, Varanasi".¹⁵ It has many other towns also like Ayodhya, Ballia¹⁶, Ghazipur, Vindhyachal, Chunar and Sultanpur¹⁷ etc. Most of these towns have village origins, while a few of them have historico-political origins either on the river banks or on the ancient highways. A number of towns were developed gradually and some of them near or over the ruins of the old ones. Substantial attractions provided by urbanisation during the modern times have given birth to a number of new towns and have also modified and revived their old locations. Most of the present urban centres of Eastern Uttar Pradesh are either the district or the tahsil headquarters. It does not mean, however, that their origin started with this very function, although it is quite certain that their developments are largely due to their being the seats of administration. Towns, in the modern times, have also developed at the cross-roads and at the railway junctions. But those situated on river banks have begun to decline. However, the rivers have provided extensive sites and elongated forms to many urban centres. Varanasi, Mirzapur, Ghazipur and Ballia along the Ganga; Sultanpur and Jaunpur along the Gomti; Faizabad and Tanda along the Ghaghra; and Barhaj and Gorakhpur along the Rapti are some of the important examples of river-side towns. Deoria, Pratapgarh, Rasra, Maunath Bhanjan, Robertsganj, Shahganj and such other urban centres have developed along the junctions of roads. The new towns such

as Renukoot, Obra, Pipri, and Chopan have developed because of their industrial importance. Most of the smaller towns have grown due to the location of administrative offices, educational centres, railway colonies or some sort of industrial activity. Maruadih has developed mainly due to its locomotive workshop and Mughalsarai has developed mainly as a railway town. Most of the smaller or medium size towns have their recent village origins. It is only due to some urban functions performed by them that they are treated as towns.

Eastern Uttar Pradesh, in comparison to its western counterpart, is a less urbanised region. It has an urban population of about 2.21 million persons which is distributed into sixty-six urban centres of varying sizes. Out of sixty-one tahsils comprising Eastern Uttar Pradesh, eighteen* have no urban centres and hence no urban population. The district-wise distribution of urban population of Eastern Uttar Pradesh (Table III-5) shows a wide range of spatial variation. The highest percentage of urban population is accounted for by the District of Varanasi (25.12 percent), while the lowest is recorded by the district of Sultanpur (1.96 percent). Varanasi District ranks higher than both U.P. and India in this respect because it includes, in addition to Varanasi city, nine other

* Kaiserganj (Bahraich), Bikapur (Faizabad), Musafirkhana, Amethi, Kadipur (Sultanpur), Kunda, Patti (Pratapgarh), Harraiya, Dummariyaganj, Naugarh (Basti), Pharenda, Maharajganj (Gorakhpur), Hatta (Deoria), Phulpur, Sagri, Lalganj (Azamgarh), Zamania (Ghazipur) and Handia (Allahabad).

Table III-5
Urban Population - 1941-71

Name of the District, Area State and country	Percentage of urban population in to the total population			
	1941	1951	1961	1971
Bahraich	4.89	4.91	5.30	5.93
Gonda	5.42	4.58	4.88	5.65
Meerut	7.31	8.98	8.67	9.56
Sultanpur	1.18	1.85	1.97	1.96
Pratapgarh	1.24	1.36	1.71	1.96
Basti	1.09	1.39	1.46	2.54
Gorakhpur	4.94	6.18	7.30	7.90
Deoria	1.98	2.23	2.42	2.96
Azamgarh	4.33	4.24	4.64	5.21
Jaunpur	5.17	5.35	5.29	6.21
Ballia	3.95	4.13	3.74	4.58
Ghazipur	4.00	4.30	3.42	4.51
Varanasi	17.64	20.88	23.31	25.12
Mirzapur	10.95	11.13	11.53	12.03
Allahabad*	01.57	01.58	01.61	01.63
Eastern U.P. (Total)	05.14	05.71	06.24	07.06
Uttar Pradesh(Total)	12.41	13.64	12.85	14.03
India (Total)	13.85	17.29	17.78	19.91

Note: Figures are based on Census Reports of India 1941, 51, 61 & 71.

* Figures for Allahabad include the tahsils of Saroan, Phulpur and Handia only.

small towns within its administrative limits. It is followed by the Districts of Mirzapur, Faizabad and Gorakhpur with 12.03, 9.56 and 7.90 percents respectively. They are the big size urban centres of this region which have added much to its urban population. Mirzapur District has attracted industries and hence it has increasing trend of urbanisation. All other districts of this region claim the urban population in varying proportions from 1.96 percent for Pratapgarh to 6.21 percent for Jaunpur. After a long period of apathy on the part of the industrialists and the State Government, now various schemes of industrialisation and development are a foot to strengthen the economy of this region. This has resulted in a slightly faster growth rate of urban population, which ^{is} evident from the Table III-5.

The Table III-5 shows a marked improvement in the proportion of urban population to the total population of the districts comprising Eastern Uttar Pradesh. This is indeed a good sign of progress which should further be accelerated by developing all the sectors of its economy particularly the agricultural sector. Urbanisation in this region is very low as it has only 7.06 percent of its population in the urban areas. as against 14.03 percent of whole U.P. and 19.91 percent of India. Each urban centre of this region has, therefore, to serve a larger number of rural settlements than an average town of the state. This indicates the marketing facilities for the collection of agricultural produce from the rural areas to the urban centres as well as for the distribution of

essential commodities in those areas from the towns have to be organised more extensively in this region. This also shows a lower degree of industrialisation in the region. The Table III-5 clearly indicates the growth of urban population and its trend by the districts for the period 1941-71.

3.A16. Number and Size of Towns: Temporal Trends:

The difficulties in the way of developing an all-embracing standard method of urban grading have baffled all solutions and therefore, it has become a practice to adopt a statistical basis for purposes of comparison. The Indian Census has adopted the population size as the main basis for classifying towns and urban centres. Accordingly it has graded urban settlements into six classes which differ widely in their population sizes and characteristics, and are recognised separately on the basis of their status, such as Urban Agglomeration (U.A.), Municipal Corporation (M.C.), Municipal Board (M.B.), Cantonment (Cantt.), Town Area (T.A.), and Notified Area (N.A.). Table III-6 provides the distribution of all such centres of the region among the six classes and compares the number of towns of each class and their population with each of the other classes on a time scale.

The Table III-6 clearly shows the trends of growth of population and the rise in the numbers of various classes of towns. It may be pointed out that the changing trends are mainly due to the following four reasons:

- (i) The movement of towns of a particular class to a different class due to changes in the size of population.
- (ii) The elevation of formerly a rural area to a township particularly as per census of 1971.
- (iii) The declassification in 1961 census of the swollen villages treated earlier as towns in 1951 census back to villages.
- (iv) The amalgamation of a number of towns in-to Corporation or Agglomeration.

The numbers of urban centres in Eastern Uttar Pradesh were 46 (excluding four urban places amalgamated later), 46, 47 and 66* with populations of 10.81, 13.42, 16.64 and 22.10 lakhs in 1941, 1951, 1961 and 1971 respectively. The number of towns falling in each class has varied significantly from one census to the other and it has influenced much in recent decade; the proportion of urban population of Eastern Uttar Pradesh. Remarkable decennial variations are noticed in the

* (1. Bahraich, 2. Bhinga, 3. Nanpara, 4. Gonda, 5. Balrampur, 6. Tulsipur, 7. Utraula, 8. Colonelganj, 9. Nawabganj, 10. Faizabad cum Ayodhya, 11. Gosainganj, 12. Akbarpur, 13. Jalalpur, 14. Tanda, 15. Sultanpur, 16. Pratapgarh Bela, 17. Basti, 18. Bansi Khas, 19. Khalilabad, 20. Gorakhpur, 21. Barhalganj, 22. Deoria, 23. Padrauna, 24. Siwarhi, 25. Gaura Barhaj, 26. Azamgarh, 27. Kopaganj, 28. Maunath Bhanjan, 29. Mubarakpur, 30. Muhammedabad, 31. Jaunpur, 32. Shahganj, 33. Mariahu, 34. Machhalishahar, 35. Mugra Badshahpur, 36. Kerakat, 37. Ballia, 38. Reoti, 39. Rasra, 40. Ghazipur, 41. Mohammedabad, 42. Saidpur, 43. Varanasi, 44. Ram Nagar, 45. Maruadih, 46. Lohta, 47. Mughalsarai, 48. Chandauli, 49. Chakia, 50. Gyanpur, 51. Bhadohi, 52. Gopiganj, 53. Mirzapur, 54. Kachhwa, 55. Robertsganj, 56. Churk Ghurma, 57. Obra, 58. Chopan, 59. Markundi, 60. Chunar, 61. Ahraura, 62. Renukoot, 63. Dudhi, 64. Pipri, 65. Mau Aima, 66. Phulpur).

cases of class I towns, which alone claimed 24.61, 36.44 and 46.27 percents in 1941, 1951 and 1961 respectively of the total urban population of this region. The large size urban centres of this region expanded much due to ^{better} industrial and commercial activities, public amenities and transport services while *in* class II towns population claimed a lower proportion at successive censuses during the period 1941-61.

The class III towns had no definite trend as this size class claimed 28.49, 22.95 and 25.24 percents of the total urban population of this region in 1941, 1951 and 1961 respectively. This so happened because the number of such towns was 10 in 1941 as well as in 1951 but it suddenly rose to 13 in 1961. The class IV towns had a fluctuating trend, as their number rose from 8 in 1941 to 10 in 1951, which further increased ^{to} 21 in 1971 from 11 in 1961 and its percentages of population were 9.71, 10.66, 8.48 and 12.67 percents in 1941, 1951, 1961 and 1971 respectively of the urban population of this region. Sudden rise of population from 1961 to 1971 happened due to the inclusion ^{of} 10 more new towns in this category. The main variations are mainly due to the movement of towns of a particular size class to the other size classes. The class V towns numbered 17 in period 1941-61 which class VI towns were 7 in number in 1941 and 4 in 1951, and nil in 1961 but two were again recorded in this category in 1971.

Class I towns numbering four in 1971 accounted for 47.75 percent of the urban population of this region. This percentage was however, lower than that of U.P. (57.01 percent)

Table III-6

Number of towns classified by size classes with their population - 1941-71.

Size class	1941			1951			1961			1971		
	No. of towns	Popu. in lakhs	% of total urban popu.	No. of towns	Popu. in lakhs	% of total urban popu.	No. of towns	Popu. in lakhs	% of total urban popu.	No. of towns	Popu. in lakhs	% of total urban popu.
Class I 100,000 & above	1	2.66	24.61	2	4.89	36.44	3	7.70	46.27	4	10.53	47.75
Class II 50,000 to 99,999	3	2.24	20.74	3	2.21	16.47	3	2.06	12.38	4	2.72	12.32
Class III 20,000 to 49,999	10	3.08	28.49	10	3.08	22.95	13	4.20	25.24	12	4.33	19.60
Class IV 10,000 to 19,999	8	1.05	9.71	10	1.43	10.66	11	1.41	8.48	21	2.80	12.67
Class V 5,000 to 9,999	17	1.46	13.50	17	1.49	11.10	17	1.27	7.63	23	1.69	7.65
Class VI Below 5,000	7	0.32	2.95	4	0.32	2.38	-	-	-	2	0.03	0.01
Total	46	10.81	100.00	46	13.42	100.00	47	16.64	100.00	66	22.10	100.00
Class of Towns												
U.P. (percent)	I	57.07	10.77	II	16.74	10.36	III	4.83	0.23	V	0.80	OF Total Urban Population
India (percent)		52.41	12.15		17.36	12.04		5.24	0.80			OF Total Urban Population

Source: Census of India, 1941, 51, 61 & 1971.
Popu. = Population.

as well as that of India (52.41 percent) (Table III-6). Class II towns also numbering four with a population of 2.72 lakhs claimed 12.32 percent of the total urban population of the region as against similar figures ^{of} 10.77 percent for whole U.P. and 12.15 percent for India. Another 19.60 percent of the urban population ^{was} ~~were~~ living in 12 towns of class III in this region. This percentage ranked higher than this state's average ^{of} 16.74 for this class. In case class IV and V towns, Eastern Uttar Pradesh showed a higher percentage than that of whole U.P. and India. The situation was different again in the case of class VI towns, as in their case the percentage rose from nil in 1961 to only 0.01 percent in 1971 as against 0.23 percent and 0.80 percent for U.P. and India respectively in that period. It is notable that about four-fifth^s of the urban population of this region lived in large towns with a population of 20,000 and above in each case in recent decades because of the amenities of varied nature available to them in such urban centres.

From the foregoing analysis it can be concluded that region under study is relatively less urbanised part of Uttar Pradesh. "The process of urbanisation has already set in and the development of urban centres is taking place in hotch-potch manner, so that no distinct pattern has emerged".¹⁸ It is, however, hoped that in due course of time, urbanisation will come to have some standard pattern and characteristics ^{of} ~~of~~ the region's over-all growth in population.

(B) GEONOMIC FOUNDATIONS3.B1. General:

Geonomic foundations of a region are the potent factors which determine the gainful engagement of its people by setting the stage for their economic development, which finds expression in various forms, such as Agriculture, power generation, means of transport and communication, minerals, industries, urbanisation etc.

3.B2. Agriculture:

The term 'agriculture' is a comprehensive one and it includes all productive efforts undertaken by man in producing vegetables, fruits and foodgrains etc. by the cultivation of soil and in rearing and breeding of cattle, poultry farming, dairying etc. Hence, agriculture includes animal husbandry and livestock raising also. Eastern Uttar Pradesh is par excellence an agricultural region and the importance of agriculture and its allied activities is well borne by the fact that they engage 84.10 percent of its active workers and still a greater percentage of population is attached to the soil directly or indirectly.

About 66.03 percent of the total area of Eastern Uttar Pradesh was recorded as net sown area in the previous decade*, in addition 2.73 percent and 2.28 percent under current and other fallows respectively. Further 4.86 percent area came

* Season and crop Report of Uttar Pradesh, 1968-69, Published 1974, Lucknow.

under culturable waste land which can be brought under plough with improved methods of cultivation. Thus well over 75 per-cent of the area of this region can be put to agricultural use directly. In addition 3 percent of the area was devoted to tree crops and groves. Most of the usar tracts, scrublands and other such areas are also put to agricultural uses by the farmers to establish their claim of tenancy over them.

Of the total area of the region 21.13 percent was sown more than once. Therefore, the percentage of the total area of Eastern Uttar Pradesh put to agricultural use is quite high in comparison to other parts of this state and many other parts of India. The Table III-7 provides the details of areas put under net sown and under double cropping for the districts of Eastern Uttar Pradesh.

It is quite evident from Table III-7 that the agricultural resource base is quite unevenly distributed over the entire region. On the district level, the net area sown varied from 81.91 percent in case of Deoria to 29.75 percent for Mirzapur. All the districts which have large tracts under forest have lesser percentage of the net area sown than the average for the entire region of Eastern Uttar Pradesh. Five districts namely, Deoria, Ghazipur, Basti, Azamgarh and Jaunpur have 81.91, 80.39, 77.99, 75.98 and 75.04 percents of their total reporting areas under the net sown category, while the districts of Gorakhpur and Ballia have below 75.00 percent but above 70.000 percent area under this category. Among other districts Gonda (with its large area under forests); Faizabad,

Sultanpur and Pratapgarh (with their notable usar and infertile tracts) record below 70.00 percent but above 65.00 percent of their area under net sown category. It actually varies from 69.33 percent for Faizabad to 67.62 percent for Pratapgarh. The reasons for such a wide variation in the net area sown may be, the topographic conditions, the amount of precipitation, the fertility of the soil, the means of irrigation and the cultural factors like growth of transport and rural urban composition of population.

Deoria District noted for its highest percentage in the region under net area sown has a very small area under forest cover (0.20 percent), under barren or unculturable waste tract (01.90 percent), under culturable waste (01.80 percent) and under pasture and other grazing ground (0.025 percent); while Mirzapur District having lowest percentage under net sown category (29.75 percent) in this region with a high as 39.31 percent of its area under forests has 06.90 percent area under barren or unculturable waste and 04.15 percent under permanent pasture and other grazing lands. Therefore, the Districts of Deoria and Mirzapur serve as examples of extreme order in the region.

Heavy dependence on agriculture and a high pressure of the density of population in this region has encouraged its cultivators to resort to the practice of double cropping in order to push up the production of cereals to feed its ever increasing population. Double cropping actually means the raising of two successive crops in a year on the same fields.

Table III-7

Net Sown Area and Double Cropped Land^s in Eastern Uttar Pradesh - 1968-69.

Name of the Districts/Region and State	Reporting area	Net sown area		More than once sown		Total cropped area ^s in acres
		Acres	Percent	Acres	Percent	
1. Bahraich	1,703,400	1,099,873	64.56	358,547	21.05	1,458,220
2. Gonda	1,845,567	1,282,408	69.47	504,803	27.35	1,787,212
3. Faizabad	1,080,780	749,197	69.33	250,233	23.15	999,430
4. Sultanpur	1,100,400	758,852	68.96	234,775	21.34	993,627
5. Pratapgarh	908,679	614,671	67.62	165,827	18.25	780,498
6. Basti	1,813,739	1,414,709	77.99	475,330	26.21	1,890,039
7. Gorakhpur	1,565,540	1,171,504	74.84	351,861	22.48	1,523,365
8. Deoria	1,339,973	1,097,576	81.91	393,938	29.48	1,491,514
9. Azamgarh	1,419,725	1,078,890	75.98	264,857	17.88	1,347,747
10. Jaunpur	995,320	746,958	75.04	219,276	22.03	966,234
11. Ballia	793,572	584,685	73.66	165,062	20.79	749,747
12. Ghazipur	833,023	669,633	80.39	179,190	21.51	848,823
13. Varanasi	1,293,750	836,682	64.74	352,689	27.57	1,189,371
14. Mirzapur	2,992,044	892,534	29.75	238,512	07.98	1,131,046
15. Allahabad*	1,824,629	1,205,493	66.05	386,397	21.18	1,591,890
Eastern U.P.	21,510,141	14,203,466	66.03	4,545,297	21.13	18,748,763
Uttar Pradesh	63,024,763	41,613,096	65.87	12,759,319	20.24	54,372,412

Source: Based on Season and Crop: Report of Uttar Pradesh 1968-69, published, 1974, pp. 51-67.

* Allahabad means district of Allahabad.

This pattern is, however, not uniformly followed in all the districts of the region, because it is governed by a number of factors which differ widely from one district to the other.

This region records 21.13 percent of the total reporting area under double cropping and this compares well with 20.24 percent for the whole of Uttar Pradesh and indicates greater significance of double cropping. The highest percentage under double cropping in this region is recorded by Deoria District (29.48 percent), followed by the Districts of Varanasi, Gonda and Basti (all having above 25.00%). The lowest percentage is recorded by Mirzapur District (07.98%). The Districts of Azamgarh with 17.88 percent and Pratapgarh with 18.25 percent situated in the Doab come under the middle range and they also show wide variation in comparison to other districts of the region. The Districts of Faizabad, Gorakhpur, Jaunpur, Ghazipur, Sultanpur, Bahraich and Ballia recorded a somewhat higher percentage (between 20.00 and 25.00 percents) of the total cropped land under this category. Now it is quite clear that the practice of double cropping is gaining ground year by year with the improvements in the means of irrigation and other conditions. The introduction of chemical fertilisers and the improved seeds have brought a big revolution in agriculture and the practice of double cropping is being resorted to very vigorously over the entire region.

3.B3. Cropping Pattern:

The areas sown in Eastern Uttar Pradesh provide three harvests viz. Kharif, Rabi and Zaid. The Kharif harvest covers

the largest area sown as it accounts for 56.80 percent of the total cropped land. The Rabi harvest covers another 42.77 percent, while only 0.43 percent is under the Zaid harvest, which is negligible. Thus the Kharif harvest leads the Rabi harvest by 14.03 percent in this region. In case of whole of Uttar Pradesh the Kharif has 52.40 percent sown area under it, which compares well with 47.15 percent of ^{it}that area accounted for by the Rabi crops. Therefore, in comparison to the whole of Uttar Pradesh, the Eastern Uttar Pradesh is markedly significant for its more acreage under the Kharif crops (Table III-8).

All the crops grown under Kharif, Rabi and Zaid are sometimes conveniently grouped into two categories (i) The Food crops; and (ii) The Non-food crops. (i) The Food crops have two broad sub-categories (A) Food grains including (a) Cereals, and (b) Pulses; and (B) Others ^{which} include potato, sweet potato, sugarcane, fruits etc. (ii) The non-food crops have five main subcategories (A) The Fibres; (B) The Oilseeds; (C) The Fodder Crops; (D) Tanning materials; ^{and} (E) Drugs and Narcotics.

Of the total cropped area of this region in 1968-69 as much as 96.50 percent was devoted to the cultivation of food crops alone and only 03.50 percent was used for growing the non-food crops as against similar figures 92.02 percent and 07.98 percent for the whole of Uttar Pradesh respectively. This shows the dominance of food crops and comparative negligence

Table III-8

Eastern Uttar Pradesh total cropped land (Kharif, Rabi and Zaid crops).
Further classified into Food crops and Non-food crops and their details.

Name of the region/ state	Kharif, Rabi and Zaid			Kharif			Rabi			Zaid		
	TC	FC	NFC	TC	FC	NFC	TC	FC	NFC	TC	FC	NFC
E.U.P.	100.0	96.50	03.50	56.80	54.35	02.45	42.77	41.73	01.04	00.43	00.42	00.01
U.P.	100.0	92.02	07.98	52.40	46.25	06.15	47.15	45.35	01.80	00.42	00.39	00.03

Name of the region/ state	Food grains		Details of cereals						Sugar cane	Total Fibre	Total oil seeds	Others
	Cereals	Pulses	Rice	Wheat	Barly	Bajra	Maize	Jwar				
E.U.P.	72.80	17.40	32.43	14.61	11.47	01.89	06.16	01.42	03.73	00.65	01.35	04.07
U.P.	66.30	19.00	19.00	21.42	07.20	04.83	06.57	04.46	04.55	00.65	03.73	05.77

TC = Total cropped land.

FC = Food crops

NFC = Non-food crops.

Acreeage in percent. Year 1968-69.

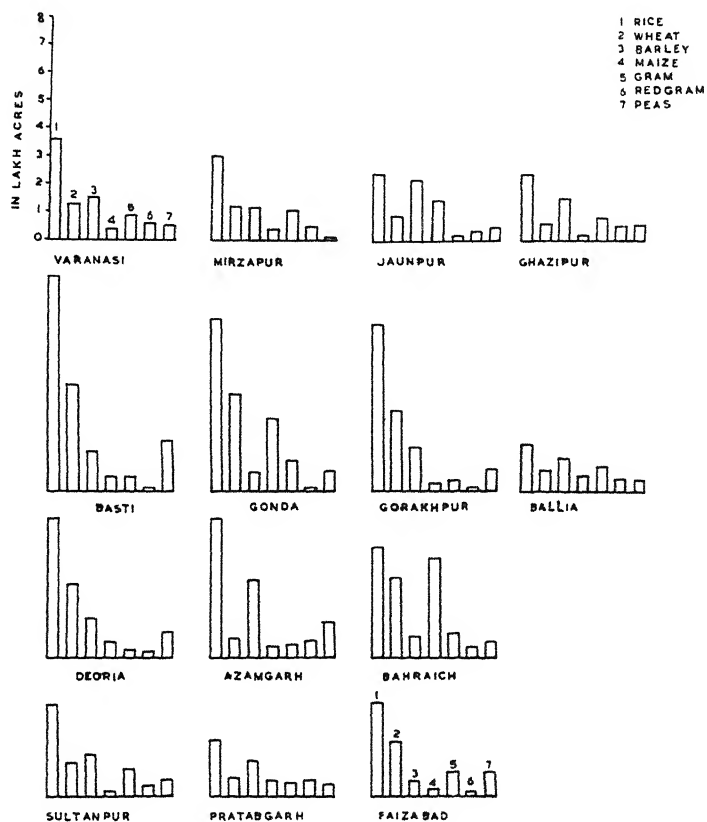
of non-food crops in this region as compared to the state. Among the food crops Rice, Wheat, Barley, Maize, Bajra, Jwar, Gram, Peas, Sugarcane, Arhar are important, while oilseeds, Fodder crops, Fibre crops are significant among the non-food crops but the areas under them is much smaller.

Food crops which have generally lower values as compared to commercial or cash crops are grown over a very large area of this region. Among the food crops, the percentage of area devoted to cereals and pulses accounted for 72.80 percent and 17.40 percent respectively as compared to 66.30 percent and 19.00 percent for the whole of Uttar Pradesh. Among the cereals paddy is the most important which covered 32.43 percent of the total cropped land of the region as against only 19.00 percent in the case of whole of U.P. But the percentage of area under high value crops are lower here than that of whole of U.P. Wheat, Sugarcane and Oilseeds have lower percentages than the state average of 21.42, 04.55 and 03.73 percents respectively. Also the average per acre yields for most of the region ^{were} ~~was~~ quite low. However, in case of Jwar, Bajra and Maize, yields were reasonably high.

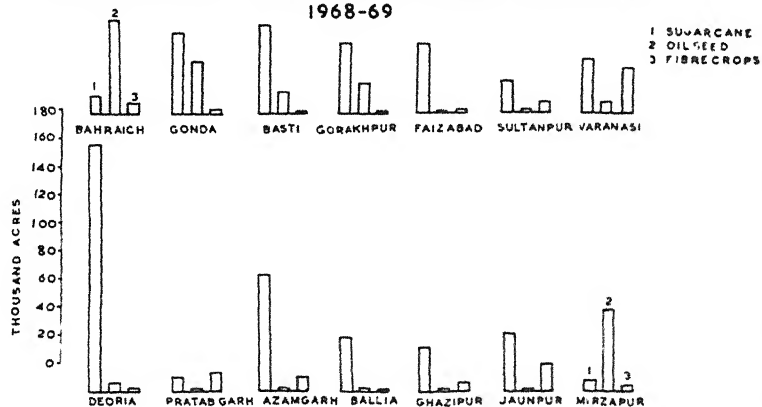
Among the non-food crops of the region, Jute, Sann-Hemp, tobacco, opium may also need reference. In 1968-69 13,618 acres were devoted to Jute, while Sann-Hemp, tobacco and opium covered 107,860; 1,537 and 1,677 acres respectively. Thus acreage under these crops was quite nominal and it adds little to the regional economy.

EASTERN UTTAR PRADESH

ACREAGE UNDER RICE, WHEAT, BARLEY, MAIZE, GRAM, PEAS
& REDGRAM
1968-69



ACREAGE UNDER SUGARCANE, OILSEEDS & FIBRE CROPS
1968-69



Sugarcane, oilseeds, wheat and fibre crops are the main cash crops of this region. They are finding favour of the farmers with increasing commercial consciousness. Potato is another commercial crop of the region. The recent installation of sugar factories at various places are likely to boost up the cultivation of sugar cane in this region, which is a significant cash crop. However, the acreage under this crop accounts for only 03.73 percent of the total cropped land of this region as against 04.55 percent of whole U.P. Its spatial distribution is quite uneven depending on various factors. More than 25 percent of total area under sugarcane of this region lies in Deoria District which leads the other Districts e.g. Azamgarh, Basti, Gonda and Faizabad in this sequence. Spatial distribution of main crops by districts of the region has been shown in Fig.15.

3.B4. Crop Association Pattern:

Except the southern uplands and some other minor areas here and there, almost similar conditions of terrain and climate prevail in general over the entire region of Eastern Uttar Pradesh. But the details of agricultural land use and orientations¹⁹ widely differ at the subregional levels indicating the nature of variations of crop-associations. A sub-regional synthesis²⁰ of agricultural land use and methods of cultivation in this region reveal that there are still the primitive stages of shifting and subsistence agriculture over wide areas of southern uplands, particularly in its Sonepar

tract, which has yet not been put to economic and modern trends of cultivation. However, there is much improvement in the extensive agriculture of the northern tahsils of the Trans-Ghaghra tract and the intensive agriculture of the Ganga-Ghaghra Doab has been well developed.

The spatial distribution of individual crops and their variable positions among themselves as well as their integral characteristics, ^{and} a study of the different categories of crop-associations and their areas in this region based on the analysis and synthesis of the general land use patterns is very necessary. The recognition of a crop-association region is based on the statistical examination of the "relative" land occupancy strengths²¹ of various crops (Food crops and Non-food crops) by taking into consideration their respective percentages of total cropped area in that region. For the sake of convenience each District has been taken as a separate region here and has been grouped into different crop-association patterns.

In grouping the various crops into their association patterns, only those five major crops of each District have been taken into consideration, which carry at least about 5 percent or more of the total cropped land of that District. In this way four orders of crop associations and their areas have been recognised. Among the five major crops taken into account, rice dominates the cropping pattern, both in acreage and production without having a close rival. There are following orders of categories or groups of crop association: Three

of the first order; nine of the second order; twelve of the third order and fourteen of the fourth order. The part of Allahabad forming this region has been ignored.

Table III-9

Orders of Crop Association Groups in
Eastern Uttar Pradesh

Orders and Groups	Crops and Districts
1. First order having groups of two crop associations	(i) RB: Varanasi, Pratapgarh, Jaunpur, Ballia, Ghazipur and Azamgarh. (ii) RW: Mirzapur, Gorakhpur, Deoria, Faizabad, Gonda, Sultanpur and Basti. (iii) RM: Bahraich.
2. Second order having groups of three crop associations	(i) RBW: Varanasi and Pratapgarh. (ii) RBM: Jaunpur. (iii) RBG: Ballia and Ghazipur. (iv) RBP: Azamgarh (v) RWB: Mirzapur, Gorakhpur and Sultanpur (vi) RWSu: Deoria (vii) RWP: Basti and Faizabad (viii) RWM: Gonda (ix) RMW: Bahraich
3. Third order having groups of four crop associations	(i) RBWG: Varanasi (ii) RBWA: Pratapgarh (iii) RBMW: Jaunpur (iv) RBGW: Ballia and Ghazipur (v) RBPSu: Azamgarh (vi) RWBG: Mirzapur and Sultanpur (vii) RWBK: Gorakhpur (viii) RWSuB: Deoria (ix) RWPG: Faizabad (x) RWPK: Basti (xi) RWMG: Gonda (xii) RMWB: Bahraich
4. Fourth order having groups of five crop associations	} See next page

continued

Table III-9

Sl. No.	Crop association groups	District	Ranked percentage series of major crops				
1.	RBWGA	Varanasi	30.19	12.85	11.26	6.43	6.43
2.	RBWABa	Pratapgarh	26.43	16.51	9.84	7.75	6.53
3.	RBMWP	Jaunpur	24.26	22.70	15.29	9.53	5.12
4.	RBGMM	Ballia	23.08	16.28	12.11	9.32	7.65
5.	RBGWP	Ghazipur	27.61	17.96	9.68	6.91	6.48
6.	RBPSuW	Azamgarh	36.74	20.65	9.59	6.30	5.13
7.	RWBGSA	Mirzapur	26.88	11.14	10.95	9.23	5.55
8.	RWBKP	Gorakhpur	39.39	19.10	10.25	7.92	5.42
9.	RWSuBK	Deoria	33.12	17.82	12.05	9.28	7.81
10.	RWPKB	Basti	40.62	19.96	9.68	7.53	7.19
11.	RWPGB	Faizabad	35.53	22.29	9.77	8.04	5.49
12.	RWMGK	Gonda	34.72	19.60	14.49	6.13	4.32
13.	RMWGB	Bahraich	27.47	25.11	19.95	6.29	5.17
14.	RWBGP	Sultanpur	33.46	12.54	9.69	9.64	6.26

Note: (i) The letter symbols denoting the crop associations.
R = Rice, W = Wheat, B = Barley, Ba = Bajra, G = Gram,
P = Peas, S = Sanwa (common millet), K = Kodo,
Su = Sugarcane, A = Arhar, M = Maize.

(ii) The calculations in the are based on the 'Season and crop: Report of Uttar Pradesh for the year 1968-69. This series was not published for later years.

It is hoped that significant changes would follow in the crop associations in near future due to various improvements. But these changes are likely to affect the lower order crop associations only. The first and second orders will, however, remain unchanged for a long period of time. Any such change must improve the economic conditions of the people and raise their standard of living.

3.B5. Irrigation:

Irrigation is of paramount importance for successful operations of farming in view of the seasonal concentration

Table III-10

Distribution of Irrigated Areas (Acreage) of Eastern Uttar Pradesh By Different Means of Irrigation - 1968-69.

Name of the Districts/Region/State	Total irrigated area excluding double cropping area under irrigation (Acre)	Percentage irrigated of net sown area	Canals	Tanks	Wells	Others
1. Bahraich	98,576	09.00	Nil	47,928	50,502	146
2. Gonda	323,310	25.20	1,370	76,406	227,298	18,236
3. Faizabad	399,032	53.30	86,131	66,160	240,570	6,171
4. Sultanpur	298,016	39.30	50,892	46,508	200,249	367
5. Pratapgarh	246,461	40.10	63,843	30,300	149,035	3,283
6. Basti	682,773	48.30	35,705	85,891	375,894	185,283
7. Gorakhpur	458,110	39.10	25,444	91,571	270,851	70,244
8. Deoria	433,474	39.50	5,289	27,537	379,612	21,036
9. Azamgarh	548,018	50.80	47,473	42,640	410,593	47,312
10. Jaunpur	400,634	53.30	18,879	6,584	372,473	2,698
11. Ballia	219,330	37.50	51,610	11,157	149,232	7,331
12. Ghazipur	242,288	36.20	18,938	13,273	205,580	4,497
13. Varanasi	419,065	50.10	142,854	3,433	269,564	3,214
14. Mirzapur	221,307	24.80	127,946	9,225	31,437	52,699
15. Allahabad	239,136	19.80	63,067	9,120	163,850	3,099
E.U.P.	5,229,530	36.83	739,441	567,773	3,496,740	425,616
U.P.	13,904,474	33.40	5,113,637	797,894	7,468,188	524,759

Source: Season and crop Report of Uttar Pradesh, 1968-69. Published by Board of Revenue, Lucknow, 1974.

and uncertainty of rainfall and its ill-distribution both in space and time over this region. Irrigation is essential not only for such crops as sugarcane which is grown during the months of rainless summer and scorching heat but also for the proper growth and higher yields of most of the Kharif and Rabi crops. In view of the modern techniques of farming together with more use of chemical fertilisers and the introduction of improved varieties of seeds which necessitate the availability of adequate supply of water to the fields at opportune times for proper growth of crops, the importance of means^{of} irrigation can not be overlooked.

Of the net sown area of this region, 36.83 percent was irrigated during the year 1968-69 as against 33.40 percent of the whole U.P. in the same period. About two-third of the irrigated area of this region received water from tube-wells and surface wells. Next to wells, canals and tanks were important which irrigated 14.14 percent and 10.85 percent of the total irrigated area of this region respectively^{as} against 37.50 percent and 05.74 percent in the case of whole U.P. Among other sources of irrigation were the lakes, ponds and reservoirs which irrigated 08.15 percent of the total irrigated of this region against 3.04 percent in the case of whole U.P. A higher percentage of net sown area being irrigated in this region by other than wells and canals in comparison to the whole of Uttar Pradesh clearly indicates that the major means of irrigation are not developed adequately. A good percentage of double cropped area was also irrigated which inflated the

total acreage under irrigation in this region.

Particular means of irrigation are adopted in accordance with their suitability in the different parts of this region. Wells are by far the most important means of irrigation in the plains. Gorakhpur, Azamgarh, Deoria, Basti, Jaunpur and Varanasi are the very important districts for well irrigation. The wells are easily drilled and dug and are less costly in the plains because the water table is high there.

Next to wells, canals are the other important source of irrigation. They are significant in the Districts of Varanasi and Mirzapur where a large proportion of the sown area is irrigated by them. The Sharda Sahayak Canal system with its extensions in the Ghaghra-Gomti and Gomti-Saið Doabs irrigates a large tract of this region, Chandra-Prabha and Karamnasa canals lying in the eastern part of the plain, south of Ganga, Dohrighat Pumped Canal and its extensions in the Azamgarh and Ballia Districts and Deokali Pumped Canal in the Ghazipur District are other important sources of irrigation in this region. The Belan valley is also significant for canal irrigation, where Ghaggar reservoir provides water.

Tanks are important means of irrigation mainly in the Saryupar tract and western Doab of this region. In the Gangapur tract, the Districts of Gorakhpur, Basti, Gonda and Bahraich are notable in this respect. In the western Doab the Districts of Faizabad, Sultanpur and Pratapgarh are important for tank irrigation.

EASTERN UTTAR PRADESH

MEANS OF IRRIGATION

1968-69

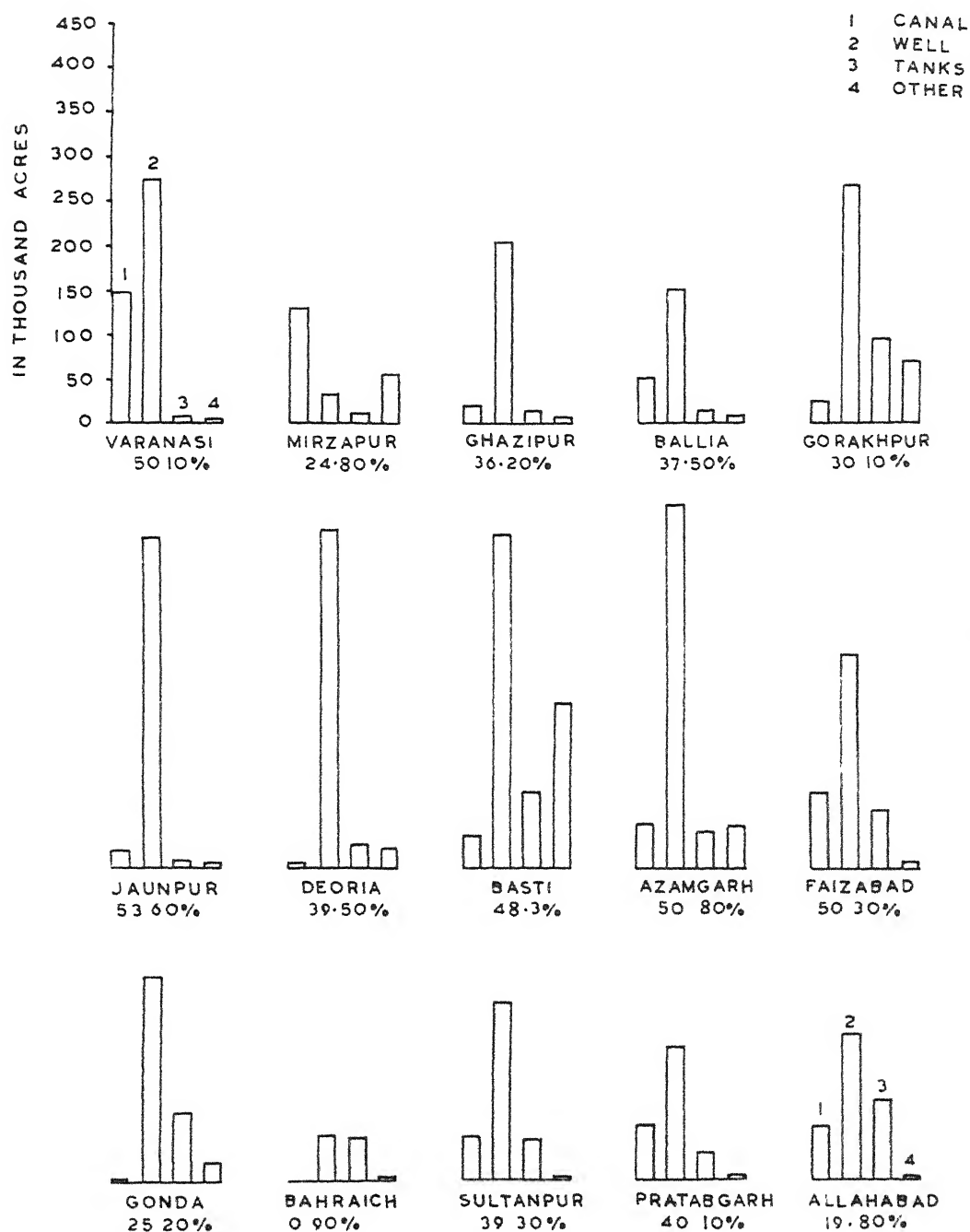


FIG NO 16

Like cultivated land, the acreage under irrigation is also quite unevenly distributed at the district level (Table III-10). Jaunpur District recorded as much as 53.60 percent of its net sown area, as the irrigated area which was the highest in the whole Eastern U.P. The next two districts in order were Faizabad with 53.30 percent and Azamgarh with 50.80 percent. Basti and Pratapgarh Districts recorded this ratio above 45 percent but below 50.00 percent. In other five districts the ratio ranged between 35 and 40 percent. It was 39.50 percent for Deoria and 36.20 percent for Ghazipur. The remaining districts of this region had quite low percentage of this ratio which varied from the minimum ^{of} 9.00 percent in Bahraich to 25.20 percent in Gonda.

The per head cultivated area in this region is decreasing since 1921 and in the recent years it has gone down to less than half an acre in almost all the districts except Mirzapur. The agriculture being receptive to all kinds of underemployed and unemployed persons ^{who} have overburdened it and so the number of persons dependent on the land is far greater than the number required to cultivate the soil. The percentage share of dependable means of irrigation through canals is only 14.14 percent which is much lower than the average ^{of} 37.50 percent for whole U.P. A large portion of irrigation depends on wells which have low intensity of water supply over small areas.

Notwithstanding the deficiencies, this region has considerable scope for improvement of its agriculture through double or tripple cropping; higher yields per acre by expansion

of irrigation, use of better seeds and fertilisers and by the application of modern tools and techniques. Let the farmers be inspired in these respects to achieve the goals.

3.B6. Live Stock:

In Eastern Uttar Pradesh animal husbandry derives its importance from the predominant agrarian economy of the region. It is next to agriculture as an economic activity of the people of this region, as also of this state, for "it accounts for one-tenth of the state's income"²² and is closely associated with the main occupation of agriculture. Cattle rearing and dairying are the two important subsidiary occupations of the rural population allied to agriculture. The dairying and poultry farming are also gaining ground near the towns and cities which provide ready markets for their products.

Live stock provides milk, milk products, hides, skins, bones, wool, meat etc. Some of these are used as raw materials for such industries as flaying, the curing of skins, the manufacture of carpets and blankets, the bone-crushing etc. which give employment to a large number of persons. Besides, the bullocks and male buffaloes form the back-bone of the rural economy as they provide chief motive power for most of the agricultural operations such as ploughing, lifting of water from the wells, thrashing of the harvest and transporting the produce to markets etc. The importance of animals ^{like} as cows and she-buffaloes, their counter parts, are noted for milk production. Sources of manures can not also remain unnoticed, because

inspite of the, advances in the production of chemical fertilisers, the cattle manure is still an important medium of maintaining and enriching the fertility of the soil. In Eastern Uttar Pradesh the live stock provide the cheap and rich manure for the soil.

The Livestock Census contains the data only in respect of cattle, buffaloes, horses, ponies, mules, camels, donkeys, pigs and poultry.

Eastern Uttar Pradesh (with whole District of Allahabad) had more than 13.26 million bovine i.e. 35.33 percent of the total for this State in 1967-68. Out of this number, cattle and buffaloes accounted ⁴⁴ 10.58 million and 2.68 million i.e. 79.8 percent and 20.2 percent of region respectively. The working animals (which are used for agricultural purposes) included 5.78 millions of cattle and 1.02 millions of male buffaloes. Their total was 6.80 millions which accounted for 40 percent of the total working animals of entire Uttar Pradesh. There are 50 animals per 100 acres of the net area sown in Eastern U.P. This ratio is larger than that of Uttar Pradesh. The total milching animals of Eastern U.P. included 2.61 millions of cows and 0.68 millions of buffaloes which accounted for 24 milching animals per 100 acres of the net area sown. This ratio is also larger for Eastern Uttar Pradesh than for this state. This clearly indicates that the numbers of working and milching animals are larger in this region than in U.P. per acre of the net area sown. But they are of poor variety and are not as strong and capable as those of the western Uttar

Table III-11

Livestock Population in Different Districts of Eastern Uttar Pradesh, 1968-69.

Note: The table indicates the following categories: (a) Bovines; (b) Draught working animals; (c) Milching animals; (d) Other livestock; and (e) Poultry.

Name of the District/Region/ State	(a) Bovines			(b) Draught working animals		
	Cattle	Buffaloes	Total	Cattle	Buffaloes	Total
1. Bahraich	819,608	286,253	1,105,261	345,582	154,408	499,990
2. Gonda	1,056,314	245,055	1,301,369	557,110	95,686	652,796
3. Faizabad	619,435	151,803	771,238	389,676	54,403	444,079
4. Sultanpur	620,932	178,081	799,013	384,476	63,778	448,254
5. Pratapgarh	579,355	170,669	750,024	341,154	65,089	406,243
6. Basti	993,681	221,789	1,215,470	645,204	75,565	720,769
7. Gorakhpur	755,884	164,290	920,174	453,300	5 4,007	507,307
8. Deoria	654,468	150,607	805,075	375,154	47,923	422,077
9. Azamgarh	786,511	210,138	996,649	463,799	73,654	537,453
10. Jaunpur	603,336	178,356	776,692	353,339	65,388	418,727
11. Ballia	386,110	86,069	472,179	156,978	28,244	185,222
12. Ghazipur	425,794	116,685	542,479	219,800	36,490	256,290
13. Varanasi	611,508	158,730	770,238	311,148	54,350	365,498
14. Mirzapur	816,215	107,087	923,302	323,720	41,772	365,492
15. Allahabad	851,764	265,521	1,117,285	457,673	107,917	564,595
Eastern U.P.	10,580,415	2,686,133	13,266,548	5,778,118	1,018,674	6,796,792
Uttar Pradesh	26,120,871	11,425,998	37,546,669	13,188,757	4,354,267	17,543,024

Contd.

Table III-11 (Contd.)

Name of the District/Region/ State	(c) Milching Animals		(d) Other Livestock				(e)	
	Cattle	Buffaloes	Total	Sheep	Goats	Ponies & Horses		Pigs
1. Bahraich	284,386	48,612	332,998	49,884	312,602	7,491	18,199	65,666
2. Gonda	290,631	60,474	351,105	50,651	188,308	5,268	27,510	90,016
3. Faizabad	119,079	39,379	158,386	44,937	116,965	2,335	30,836	76,179
4. Sultanpur	121,198	48,460	169,658	56,061	209,990	3,760	44,323	99,579
5. Pratapgarh	128,505	46,534	175,039	48,162	243,135	4,929	45,373	105,640
6. Basti	182,188	54,520	236,708	45,588	255,438	4,851	37,231	126,750
7. Gorakhpur	151,330	43,492	194,822	35,954	219,911	3,176	38,392	76,683
8. Deoria	143,799	38,566	181,365	43,506	303,778	1,961	21,696	44,814
9. Azamgarh	170,652	55,912	226,564	72,766	256,935	3,489	31,879	224,235
10. Jaunpur	139,057	49,173	188,230	114,545	140,077	2,609	22,954	113,029
11. Ballia	120,893	23,352	144,345	30,464	112,667	2,705	13,140	43,162
12. Ghazipur	107,197	33,934	141,131	76,527	130,830	2,888	9,280	106,920
13. Varanasi	162,217	48,763	210,980	125,730	187,925	1,979	14,169	151,979
14. Mirzapur	278,851	26,308	305,159	63,644	187,175	4,333	7,053	116,323
15. Allahabad	210,142	70,879	281,021	162,030	295,003	9,751	89,719	175,519
Eastern U.P.	2609,053	688,358	3297,401	1020,149	3160,739	61,525	451,754	1617,673
Uttar Pradesh	6709,953	3029,154	9739,107	2623,292	8136,104	229,845	1162,279	3771,027

Note: Table is based on "Season and Crop". Report of Uttar Pradesh, 1968-69, Published by the Board of Revenue (Land Reforms), Uttar Pradesh, Lucknow, 1974, pp. 195-208.

Pradesh. Their poor breed, the shortage of fodder and other nutrients available for them, their poor care and the various diseases prevalent among them are the important factors responsible for their poor milk or meat yields and their lower draught capacity. The rest of the cattle numbering about 3.33 millions consisted of the breeding bulls and buffaloes, their young stock below three years and some others. The Table III-11 shows the account of the livestock of Eastern Uttar Pradesh for the year 1968-69 by Districtwise break up.

It is evident from the Table III-11 that in addition to a large number of bovines, a large number of other livestock such as sheep, goats, horses, ponies, donkeys, mules, camels and pigs etc. are also found in the region. The poultry is also gaining ground and its number is increasing fast. It has its own importance in the economy of the region. Due to the poor quality, the livestock has not helped much the people of the region to augment their additional income. However, the State Government is keen to develop this resource to remove the poverty of this region and to bring its economy at par with the western part of this state. On account of the efforts of the state Government a fast progress is expected in this respect in near future in this region where the economic conditions have not improved much upto this day.

3.B7. Minerals:

"Mineral deposits occur deep in the earth or its surface in most diverse form and their importance to man for

economic and industrial development is only too well known"²³ Eastern Uttar Pradesh as an economic unit ranks very low among the regions of India endowed with mineral resources. They are few rather unimportant minerals in this region. Those having commercial value include the nodular limestone conglomerates, commonly known as 'kankar' which are found below the surface; the brick earths and the saltpetre, found mostly on the surface of the Bangar tracts of the plains.

Limestone, silica sands and clays are most important minerals found in this region, Coal, iron ore, dolomite, marble quartzite etc. are other minerals of this area. The Vindhyan sandstones of this region are used as building materials.

Iron ore:

The iron ore bearing tract of this region is confined to the southern uplands, mainly in the north of Korchi ($24^{\circ}51'N$: $83^{\circ}21'E$) and ⁱⁿ scattered patches in Agori pargana. Beds of magnetite iron ore enter laminated with granular silicious layers are met with in the crystalline inliers near Koelhat. The Bijaigarh shales, forming series of upper Vindhyan, which have impure and granular saltpetre of iron having in places a thick efflorescence or iron ore are collected and used to some extent. In Dudhi tahsil of Mirzapur District, there are mines along the Pangan river (north of Korchi) which have rich iron contents. They are also located at Karwani, Nandiham and Kodari (all in Agori Pargana) and at Jungel, Parsoi, Tapu-kunch and Bargawan. Besides large supplies of inferior iron ore are

also found close to the Singrauli coal mines in the Singrauli basin. This ore is rough and generally of a dusty red colour which is dug, cleaned, ground and used in the mud furnaces by the local people since long.

Manganese:

Manganese is a hard and one of the most important minerals, but it is absent from this region, except in some samples of silicates (Rhodenite manganese) occurring in scattered patches in the southern upland tract.

Lead:

Lead is found either in the form of its ore or in the form of glena (the mixture of lead and sulphur). In this region lead is found in the shape of glena in a small quantity. Important locations are: (i) at a place about 3 kms south west of Charchari; and (ii) at a place about two and a half kms south west of Chairaikun in Sarguja ore area near the south west boundary of Mirzapur District. There is an abandoned mine of lead here formerly worked by Mr Burke. The rock in which the mine is situated is a reef of light grey colour having shattered horny quartzite. The ore appears to occur in two packets of the two branches of the same reef which are separated by a band of gneiss rocks.

Titanium (Ilmenite ore):

This mineral occurs in the southern part of Mirzapur District and is mixed with iron particles in the sandy beds of numerous river valleys of the region. Its known occurrences

are meagre and they do not encourage the commercial exploitation of the ore on systematic and scientific lines. Titanium is required for a homogeneous development of industries in a region.

Dolomite:

Dolomite is a fluxing material which is used largely in the metallurgical industries and for the manufacture of fire-bricks. It is found mixed with limestone at certain places in the areas of marble deposits of the Bichi river valley in the District of Mirzapur.

Limestone:

Lime and clay are also required in the manufacture of cement. Limestone is also used in the manufacture of industrial chemicals (such as soda ash, Calcium cyanamide etc.), paper, sugar, glass and in the tanning of leather. This is also used as a fluxing material and as a source material in the refractory industry. The limestone deposits of this region are associated with the lower Vindhyan rocks and are found at a number of places of the southern hilly tract such as Belwadah, Khajrahat, Kota, Markundi and Garia. Crystalline limestone found mixed in the soil of certain areas has long been used by washermen for laundering purposes. It is also used for the manufacture of crude glass, soap, and for curing hides and skins.

Presently the major portion of the limestone production of this region comes from its quarry at Gharma in Mirzapur

District which is the only largescale mechanised mining operation centre in this state. This production is utilised by the Government cement factories at Churk and Dalla. Limestone deposits of Markundi valley belong to the Rohtas stage of the lower Vindhya and they are also being worked for the Churk Cement factory. Limestone deposits of Khazrahat also belonging to the lower Vindhya form a second horizon of cement grade limestones and are found between the Rihand river in the west and Hardil village ($24^{\circ}27'N:83^{\circ}11'E$) in the east. Probing operations have been undertaken in this area by the State Directorate of Geology and Mining and the Geological Survey of India. As a result of this, "the quarriable limestone reserves of this region are estimated by the State Directorate of Geology and Mining at about 75 million tons of blast furnace flux type and several million tons of cement grade".²⁴

Other important limestone tracts in the District of Mirzapur occur between Kancy and Markundi; Kanch and Kandhaura; Kandhaura and Mohna; and Mohna and Basukri. The deposits found in the north of Susnai and in the west of Thiria are very good for cement industry. Limestone occurrences of minor importance are also found at Makripari and Rudauli Nallas, at Pataudh hill and near Ghaggar river. They are also of good quality. In the latter case they are found mixed with magnesia.

Building stone:

Sandstone, granite, gneiss and green marbles have long been used as building stones in this country. A renowned buildingstone is the upper Kaimur sandstone found in the

District of Mirzapur. Stones of various types have long been used in the construction of buildings at Varanasi, Mirzapur, Allahabad and many other places of India. Many historic buildings are made of this renowned sandstone. The best building stone is fine grained and homogeneous, usually yellowish and greyish white in colour, occurring in layers of several feet thickness. It is perfectly free from any kinds of fissures or jointings. A rose coloured variety of this stone is very common and its greenish layers are occasionally found. Red sandstone is popular for its durability. Red sandstones of Allahabad-Rewa-Mirzapur region were used for erecting the Allahabad fort. The important sandstone quarries of Allahabad District are located at Pratappur ($25^{\circ}17'N:81^{\circ}37'E$) and Sheorajpur ($25^{\circ}12'N:81^{\circ}4'E$) and those of Mirzapur District, at Chunar and Mirzapur itself. The latter are noted for their red sandstones. Chunar region of Mirzapur District had provided the materials for monoliths constructed by the Emperor Ashok.

In the southern part of Mirzapur District granites and gneisses occur in large quantities. They have long been used as building stones locally. Green marbles found near the confluence of Bichi and Rer rivers ($24^{\circ}8'N:82^{\circ}0'E$) have also been used as building stones locally but only rarely.

Fire-Clay:

Fire-clay deposits of this region are found only within the District of Mirzapur and at a number of places, such as Bairpan, Kaldomri, Bansi and Makharikhoh. The deposits at Bansi in this district have already been investigated in

detail and their reserves are estimated at about 3 million tones of high purity of fire-clay. They occur at Belwada also.

Sand and Silica Sand:

Sand in its crude form enters largely into the construction work as an ingredient of concrete, mortar or plaster. Silica sand is the chief raw material used in the manufacture of glass and it occurs in large quantities in the Districts of Varanasi and Allahabad. In Chakia Tahsil of Varanasi District its extensive but poor quality is found which is, however, suitable for the manufacture of bottle glass. The silica sand deposits located in the District of Allahabad are large and very good in quality but they lie outside the study region of this thesis and their mining is totally unmechanised.

Reh:

Reh which is the mixture of sodium carbonate and sulphate with some calcium and magnesium salts, is found extensively in the Districts of Ghazipur and Varanasi in the form of efflorescence from the soils of the Ganga Plain, Reh concentrations turn the fertile agricultural lands into infertile tracts quickly. These deposits occur on the surface only.

Pottery Clay:

Pottery clay deposits of Mirzapur District are being worked by 'Chunar Pottery Works' for the manufacture of glazed pottery wares. The uses of this clay are varied. They are mostly used in various industries such as porcelain, pottery, cement, ceramics and soap. It is also used in paper and textile

industries as filters. Its uses for medicinal purposes and for colour washing are also important.

Kankar:

Kankar (limestone conglomerate) deposits occur extensively throughout the Bangar tract of the Ganga Plain at varying depths below the surface. At places, particularly on the high river banks, it frequently appears as out crops. Sometimes it occurs at a depth of 8 to 10 metres below the surface and is quarried for road making and burning for lime. Its quantity and value vary much in different parts of this region. In general, the Kankar of this region resembles a soft marl and is of high value for the production of lime than as a road making material. Several varieties of its hard nodules (Kankar) are found at many places in this region and are distinguished on account of their colour rather than composition. The important varieties are the 'Telia or dark coloured'; 'the surfed Dudhia or chun coloured' (that is to say white milky or lime coloured); and the 'Baluwa or Dhusrehwa' (so called because it is found in the sandy or saline soils). Their quality depends on their solidity.

Saltpetre:

There are large tracts of saline earth in Eastern Uttar Pradesh, particularly in the Ganga Plain. Notable occurrences are found in the Districts of Ghazipur, Varanasi and Allahabad. Although it is injurious to vegetation, yet has a commercial value because it is used for the manufacture

of country glass and also as a substitute for soap. Saltpetre or potassium nitrate and sazzi or carbonate of soda are manufactured from saline earth which is collected and boiled mixed with water for processing further to have this product. Suitable nitrogen obtained from animal dungs and potash contents of wood ash are also used for the manufacture of saltpetre.

Coal:

The main coal deposits of this region are known to occur in the southern portion of Mirzapur District in the area known as 'Kota region' where a number of centres are found, such as Kota ($24^{\circ}6'N:82^{\circ}25'E$; Ujjain ($24^{\circ}10'N:82^{\circ}25'E$); Banda ($24^{\circ}5'N:82^{\circ}25'E$), Manhari ($24^{\circ}10'N:82^{\circ}29'E$), Naugarh ($24^{\circ}7'N:82^{\circ}33'E$), Sohira ($25^{\circ}N:82^{\circ}29'E$), and Amalia ($24^{\circ}2'N:82^{\circ}28'E$).²⁵ They are important locations in many ways. The Kota coal fields of Mirzapur District are the extensions of the Singrauli Basin coal fields, which belong to the Damuda series of the Gondawana system. They are also connected with coal fields of Rewah region. The whole coal, mining tract of this region extend upto about 50 kms west of Kota coal fields. Its eastern limit is, however, uncertain but in any case it does not pass beyond the Rihand river. Its northern and southern limits are marked by Aundi hills and Ballia rivulet respectively. The coal of this tract is acknowledged as of a good quality, which can burn freely with a clear flame, leaving a white ash. Nearly two million tonnes of reserves of coal are expected in this region. New measurements have although given more fantastic estimates.

Felspar and Mica:

In the southern region, the orthoclase and oligoclase varieties of felspar are usually co-existent in the rocks. However, their quantity is so small that no large scale exploitation is possible in near future. Mica in the form of biotite of a black or dark brown colour occurs usually in small laminae but occasionally associated with hornblende rocks which pass by gradations into hornblendic gneiss. A band of epidiotic rock is found in a few places, for example in low hillocks in the south west of Pakhra, which is composed of felspar and epidote with a little quartz.

Calcite deposits occur at a place about 5 kms south of Belwadah ($24^{\circ}12'N:82^{\circ}56'E$) and are mostly associated with a redish massive granite. Calcite is of white or pink colour and has low percentage of magnesia. Only a small quantity of calcite reserve is available here.

3.B8. Power Resources:

Power is essential for any programme of development. In the present age of steel and electricity all sources of power have assumed considerable significance because "the location of power resources has become the major factor even in the choice of factory sites".²⁶ Eastern Uttar Pradesh has substantial demand of power for its industrial development and irrigation by tube-wells and lift canals. A manufacturer needs power to carry his finished products to the market, a merchant needs power to maintain his cold storage and to run his shops

and commercial establishments, a farmer needs power to irrigate his fields. Means of transport also require power. Thus, factories, farms and transport systems are the greatest users of power. The use of power at different levels revolutionises the economy and exerts its influence on the occupational structure of the population of a particular region.

The modern manufacturing is possible mainly through the help of motive power, which is derived from many types of fuels such as coal, diesel, fire-wood, petroleum etc. or in the form of electricity. In future, the atomic energy, the geothermal power and solar energy would also be used for running our industries and transport vehicles.

(i) Coal:

In the recent decades certain coal-fields have been located in the District of Mirzapur, but they are not worked out on commercial scale due to their meagre deposits and inferior varieties. The coal-fields of this region are the continuation of those found in the Vindhya Pradesh region of Madhya Pradesh. On the basis of estimated reserves, the prospect of only a second class colliery is possible in this area. The brick kilns and the electric supply companies are the greatest consumers of the coal found in this region.

(ii) Petroleum, Diesel and Power Alcohol:

The crustal layers of this region do not contain mineral oil which is the source for petroleum, Diesel and power alcohol. However, the recent geological surveys show

some prospects of its existence in the Tarai region. Presently all the requirements of petroleum and allied products are met by outside supplies. The scarcity of mineral oil led to the origin of power Alcohol as the substitute of petroleum. Alcohol is obtained from molasses which is derived from the sugar industry as a by-product. It is mixed with petroleum in certain proportion to get the power alcohol and is not used as an independent fuel.

(iii) Electricity:

The region of Eastern Uttar Pradesh also comes under the Rihand Grid zone supplying hydel power. Before 1930 the units generating thermal electricity were established at Allahabad, Gorakhpur, Varanasi and Padrauna. The unit of Allahabad was completed as early as 1916. The Sohawal unit in Faizabad was completed in 1937. Before the outbreak of the Second World War in September 1939, thermal power stations were already setup at Mirzapur, Jaunpur, Ghazipur, Azamgarh, Gonda, Bahraich, Balrampur and Nanpara (in Bahraich District). During the year 1957-58 steam power stations were established at Sohawal in Faizabad District and at Mau Nath Bhanjan in Azamgarh District with 15 MW capacity each.

The above details show that mainly the thermal power has been utilised in this region since long and even in that respect also, the Eastern Uttar Pradesh is far less developed than the western part of this state. The shortage of power has been one of the important factors responsible, for the backward economy of this region. To make up this shortage,

the Rihand Hydel Power Project with initial capacity of 250 MW was completed in the beginning of 1962 in Mirzapur District. Later on one more unit of 50 MW capacity was further added to it and another thermal-hydel station was set up at Obra in the same District.

The Rihand Hydel (300 MW capacity), the Obra Hydel (100 MW capacity) and Obra Thermal (550 MW capacity) are meeting more than half of the requirements of power of this region. There is ^a proposed plan to raise the existing capacity of the Obra Thermal Station by 1000 MW within a couple of years. A 200 MW capacity unit was added to it by December 1976 and other four units of 200 MW capacity each would be installed one by one at the intervals of about six months or more. Thus in the near future, the Obra and Rihand Power Stations located in the District of Mirzapur would develop into a big power complex of the country with a total power generating capacity of about 2000 MW. The first stage of installation of the thermal project was completed by the Russian help. But the later additions of 200 MW capacity will be done indigenously*.

"Besides the preliminary work on the construction of the country's first Super Thermal Power Station at Singrauli will commence next year. Mr D.V. Kapoor the newly appointed Chairman of the National Thermal Power Corporation said that the estimated cost of proposed 2000 MW capacity Super Thermal Power Station was Rs 7,000 crores. To start with "five units of

* Northern India Patrika, Feb. 26 , 1976, p. 3, Allahabad.

200 MW capacity would be installed at Singrauli and the last 1000 MW capacity would comprise of two units of 500 MW each".*

The completion of the expansion of the Obra Rihand complex will surely remove shortage of power in this region in the near future, even if the demand for it increases at a much faster rate.

A large number of industrial units are being run by the electricity transmitted from the Obra-Rihand complex. In near future, it is expected that the power would not come in the way of proposed plans of industrial and other developments in this region. In the first phase the transmission lines of 132 KW and 200 KW capacity were laid. The work on 400 KW capacity transmission lines is now in progress which would surely improve the supply of electricity to greater distances. Such lines connecting Mirzapur, Sultanpur and Lucknow have already been completed and commissioned.

3.B9. Means of Transport and Communication:

'Transport is the life-blood of the present industrial frame work, as between the producer and consumer lies a distance which has to be covered by transportational facilities".²⁷ Besides, the arteries of transport performing several tasks have profound impact on the nature of the economy and so they have significant influence on the means of livelihood i.e. occupations of the people in a region.

* Northern India Patrika, April 8, 1976, Samachar, New Delhi.

The transport systems of Eastern U.P. have to perform a huge task of handling the goods and passenger traffics that originate and terminate mostly within, the partly outside the region. In addition to the internal demands, the transport system has to bear the burden of through traffice coming from West Bengal-Bihar-mining-cum-industrial areas and going to the central and western parts of this state or to other States of the country in its northern or western parts. The existing transport arteries are in fact carrying over-capacity traffics and in view of the large task of agricultural and industrial development ^{their development} may be taken up under the frame work of the future plans, ^{because} the need for additional transport facilities of all categories becomes imperative.

The existing structure of transport system in Eastern Uttar Pradesh consists of railways roads, navigable rivers and air routes, while the communication system consists of a network of postal services and the telecommunication lines.

(1) Railways:

The functioning of railways in meeting the vast transportation requirements of Eastern Uttar Pradesh is carried by its Northern and Eastern (both broad gauge), and North Eastern (meter gauge) sections, criss-crossing the entire region. The beginning of railways in this region dates back to December 22, 1862 when the tract from Danapur to Mughal Sarai was thrown open for traffic. Later on from Mughal Sarai to Mirzapur, it was completed on Jan. 1, 1864 and its extension from Mirzapur

to the right bank of Yamuna river at Naini ~~near~~ Allahabad was opened on August 15, 1865. Thus the trade and commercial activities were considerably accelerated in the region. The last quarter of the 19th Century was a period when the railway constructions were vigorously started in this region. The first stage of construction related to the broad gauge lines which was immediately followed by the projection of meter gauge lines, particularly in the territory north of Ghaghra river. The trunk line of the metre gauge was first extended from Bankata to Gonda through Gorakhpur and it was opened for traffic on Jan. 15, 1885. By the close of the last century, ^{it} was extended to Lucknow. A branch line from Gonda to Gorakhpur through Uska bazar and Tulsipur was completed on December 15, 1896. Another important branch line joining Gonda with Kataraniaghat on river Ghaghra was thrown open for traffic in 1898. The branch line from Gorakhpur to Chhitaunighat was completed in 1907 and that from Captaingang to ¹hawe Junction in 1910.

The important meter gauge lines from Chupra to Aurihar through Ghazipur and from Allahabad to Bhatni through Varanasi and Aurihar were completed in the begining of the present century. The last rail track laid in the region was Chunar-Churk-Garhwa road line and its extension from Churk-^{to} Singrauli. The existing network of railways has connected all the town and many medium and small centres of the region with its rural areas. An important gap in the region would be bridged up if the contemplated Barhalganj-Sahjanwa-Menhdawal and Bansi-

Dummariagunj-Balrampur railway lines are laid in the near future as they would go a long way in helping the development of the Khadar tract of the Saryupar plain west of Rapti river, which is one of the most inaccessible areas of the region.

Eastern Uttar Pradesh covering about 28 percent of the geographical area and about 36 percent of the population, of this state maintains about 2800 kms of the railway route i.e. about 35 kms for per 100 sq. kms.²⁸ of the area of the region. The existing railways reach almost all the nooks and corners of the region and most of the areas are accessible by them. The North Eastern (meter gauge) railways serving this region generally cater to the local needs of the traffice coming from short distances. The traffice of this region mostly consists of coal, foodgrains, some manufactured goods, sugar cane from the fields to the sugar mills, sugar and many other products to the intra-regional and interregional destinations.

Despite a good network of railways in the region various difficulties such as break of gauge points, inadequate yard facilities and in sufficient line capacities are experienced which must be removed in the near future to avoid considerable delays in traffic and transhipments. The railways of this region have three points of break of gauge at (i) Varanasi; (ii) Shahganj; and (iii) Jaunpur. The fourth break of gauge lies at Barabanki a close location in the west of this region. Which mostly serves the tract north of river Ghaghra, where sugar manufacturing units are located in large numbers. Due

to this break, the sugar mills suffer from considerable delays in receiving coal supplies and despatching their products to the centres of consumption. Mughal Sarai yard with a capacity of 2,600 wagons per day²⁹ is now overworked. Many rail junctions within this region are overcrowded and now they find difficulty in handling the traffic. Almost all the routes have single track and they appear to work to their full capacities. However, the extension of the Chunar-Churk-Garhwa road railway line has relieved considerably the congestion caused for the bottle-neck at Mughal sarai for the up-country traffic. The Churk-Singrauli railway line laid recently has facilitated greatly the movement of coal supplies to this region.

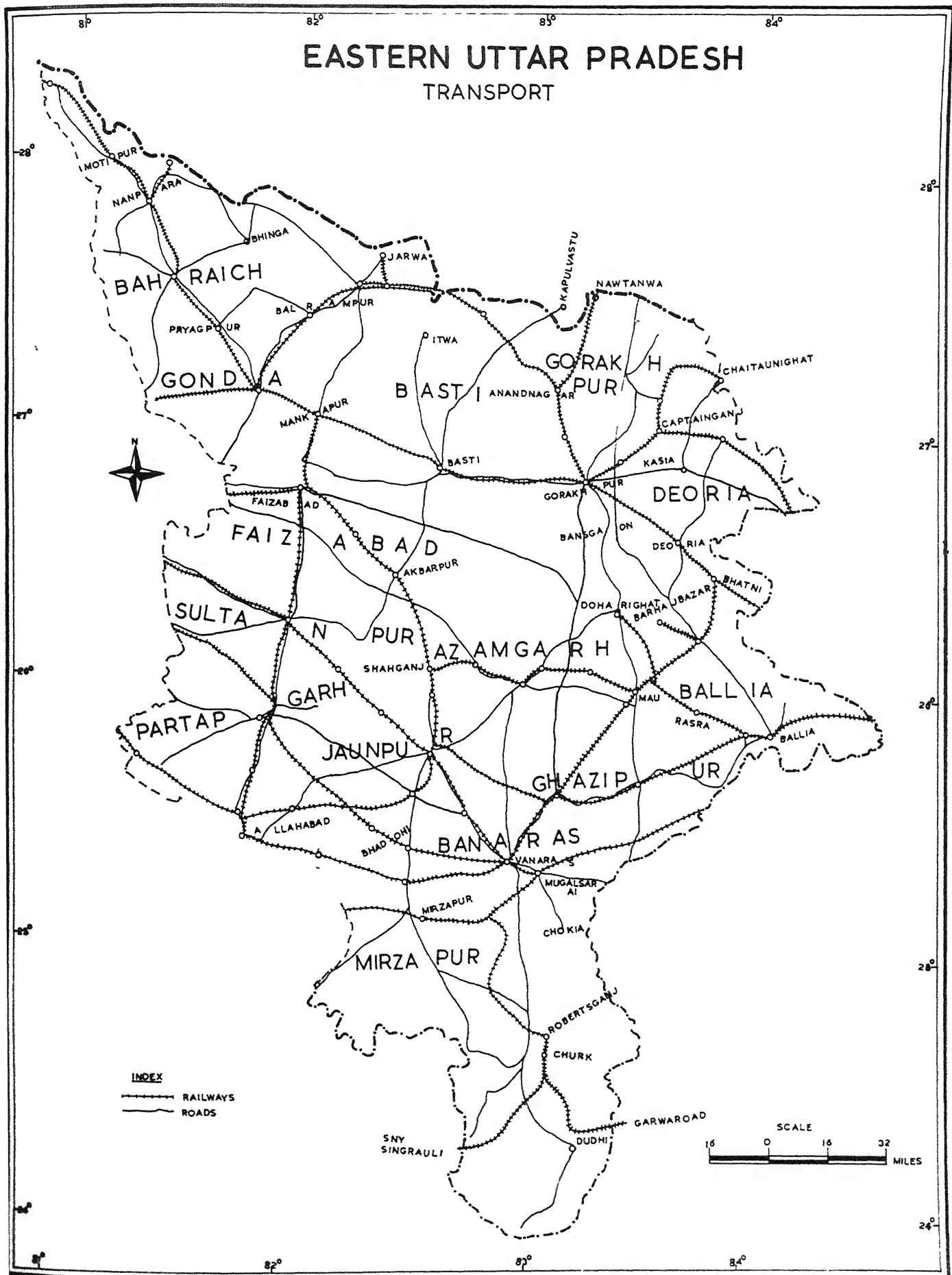
In view of the difficulties faced in handling the huge traffic, some remedial measures suggested are: (i) the removal of break of gauge by conversion of the meter gauge lines into broad gauge lines and by the provision of spacious yard facilities; (ii) the expansion of line capacity through doubling the track; and (iii) the electrification of the engines etc. The transshipment delays cause the diversion of traffic of horticultural products and some other manufactured goods together with a part of passenger traffic from rail route to road transport. Such situations will not arise, if the breaks in gauge are removed.

(ii) Roads:

Roads provide an important means of transport and linkage between different parts of a region since ancient times

EASTERN UTTAR PRADESH

TRANSPORT



and are regarded as life lines of economic and other developments as they help in the growth of trade and commerce, and the intake and offtake of goods and passengers to and from the long distances. Hence the roads and road transport are important factors governing the expansion and diversification of economic activities and the occupations of the people. Accordingly they influence the occupational distribution of population of a region also. Eastern Uttar Pradesh having almost a level plain is indeed an ideal region for the construction of roads and the development of road transport.

The history of roads and road transport in India in one form or the other is quite old. The Rig-Veda mentions Mahapatha³⁰, Arth Shastra and Shukraniti refer at length to the earliest road planning in the country. Chandra Gupta Maurya³¹ had an elaborate "Road Department". The construction and repairs of roads received much attention by the Mughal emperors, although prior to them, Shershah³² was the first ruler who got constructed a road from Howrah to Peshawar passing through this region which later on came to be known as the 'Grand Trunk Road of India'. During the British regime only the super structures on the old roads of the Mughals were built because the construction of railways received more attention. With the rise of the motor transport, after the First World War necessitated due to various reasons the attention of the government was drawn towards construction, coordination and development of roads in the country. The roads of the country are classified administratively into the

following four categories according to the Nagpur Plan:

(i) National Highways; (ii) State Highways; (iii) District roads, and (iv) Village roads.

With 35.37 percent of the population of this state within this region, it has only 32.00 percent of its total metalled road mileage, which is much less in comparison with the central and western parts of this state. During the post-independence period, there has been a considerable increase in the length of the metalled roads due to the efforts made by the Governments under the Five Year Plans. However, the road network of this region suffers from many difficulties, such as the lack of adequate number of bridges over them, the high cost of their hard surfacing and their frequent erosion and damage during the monsoon season particularly in the highly riverine tract of Saryupar plain. Thus there is an urgent need of proper bridging of the rivers and the development of a good network of all-weather road to assist the economic progress of the region.

The construction of a road bridge at Ayodhya have given much relief to the region. The opening of Lal Bahadur Shastri Bridge over Ganga at Allahabad on December 30, 1977 would go a long way in linking this region with central Uttar Pradesh and Madhya Pradesh. The U.P. State Bridge Corporation has decided to build two more bridges over Ganga in this region, one at Mirzapur and the other at Ghazipur*. Thus the bridging of the rivers at various viable points would increase the

* Northern India Patrika, March 7, 1976.

tempo of economic activities in the region. This rail-cum-road development led progressively the decline of water transport which had been an important source of trade and commerce in the region till the close of the present century.

(iii) Water Transport:

Eastern Uttar Pradesh is served by a number of rivers such as Ganga, Ghaghra, Rapti, Gomti and their tributaries. They had been the important sources for the growth and development of trade and commerce in this region before the advent of railways and wheeled vehicles. The railways by providing a far more certain and expeditious means of transport have almost supplanted these old highways of trade and commerce and have brought in the decline of inland water transport which can not now regain its old flourishing status as means of transport in face of the keen competition from rail-road traffic.

The development of inland water transport would surely provide alternative facilities for the movement of cargoes between certain riverside towns of the region and the down stream towns of Bihar and West Bengal. The Government of India is now keen to develop the inland water transport to the best possible extent. Hence some of the multipurpose river projects also include the scheme for navigable channels. The development of inland water transport is also engaging the attention of the central water ways Irrigation and Navigation Commission. For the smooth and efficient functioning of the inland water transport, the taming of the rivers, their dredging programmes

and the expansion of their existing fleet services must draw the attention of the authorities concerned if the natural water ways are tamed on a multipurpose basis, they can offer cheaper means of transit for the bulky materials like, timber, food grains and coal etc.

The Ganga-Brahmaputra Inland^{water} Transport Board was constituted in 1952, for the development of the inter-state river traffic between U.P., Bihar, West Bengal and Assam. The board has started a country Boat Towing Service between Chhupra and Patna, which now stands extended to some of the towns of Eastern Uttar Pradesh, located on the banks of Ganga and Ghaghra rivers. This step is exercising considerable influence on the development of inland water transport in the region.

(iv) Air Transport:

Air transport is also of immense importance as it helps in the movement of goods, passengers and mails over long distances and brings forth the economic reconstruction in one way or the other. Eastern Uttar Pradesh is on the air map of India through its important centre of Varanasi, mostly for the internal services, although it may contact the outside world through Calcutta in the East and Bombay in the west and New Delhi in the north-west.

(v) *communication lines:*

(*) The provision of regular postal and telegraph services are of immense benefit to the trade commerce and industrial activities of a nation. The work of communication lines would remain far from being satisfactory, unless the facilities

provided by the internal and inter-regional postal telegraphic and telephonic services^{are} made available even to the rural areas of the region. In the recent decades some expansion has been made in these respects.

The economic stagnation and underdevelopment of Eastern Uttar Pradesh owe much to the poverty of its means of transport and the want of efficient communication lines in the region. More length of all-weather metalled roads, extension of broad gauge and double line rail track and the expansion of air services in the region are bound to add to the fast development of its potentials for secondary and tertiary activities. Hence all efforts should be directed to achieve these goals.

3.10. Industries:

Eastern Uttar Pradesh is an industrially backward region. This is due to a number of factors, such as the lack of many industrial raw materials, shortage of power, inadequate transport and communication facilities, paucity of skill and capital and the need for local entrepreneurs etc. This region does not possess iron ore, mineral oil etc. which exercise a restraining influence on its industrial growth. But it has a big domestic market for industrial^{goods} of all kinds because of its population.

The large developments in the fields of agriculture livestock and forestry will certainly increase the supply of raw materials from these sources, which would provide the base for a variety of industries. The southern uplands region with

its surrounding areas has adequate supplies of non-metallic minerals, like limestone, magnesite, silica sand etc. which are being used for the development of cement and glass industries. In addition to these potentials some of the agricultural products of this region justify the existence of such industries as sugar, vegetable oils, rice-husking etc. The increasing emphasis on the establishment of such industries as fertilisers, agricultural implements etc., which are allied to agriculture in one way or the other would certainly help to speed up the rate of agricultural as well as industrial development.

The small scale industries of this region which are at present the major contributors of industrial output in many fields also need to be expanded considerably to break the vicious circle of inactivity, stagnation and poverty. It would be a good strategy of development that numerous centres of small scale industries are set up over the entire region. "Through the establishment of such centres, a vigorous class of skilled artisans, technicians and entrepreneurs, ^{would come up} who would help to accelerate the growth of large-scale industries also. Conversely the establishment of large scale industries will in themselves also require the establishment of small-scale units in close proximity to the former to feed them with various types of ancillary materials".³³ Thus the monotony of industrial structure of this industrially backward region of the state can be broken through by the establishment of small scale industries initially to generate the necessary impetus for the subsequent ingress of large scale industries. In view of the

✓ above facts the State Government has selected certain sites for the establishment of small scale and medium size industries over this region. Such focal points of industrial activity would certainly help in the faster growth of industries in this area. Some of them selected recently in the region are as given below ✓

Eastern Uttar Pradesh

Some selected centres of Industrial growth.

<u>Centres</u>	<u>District</u>	<u>Centres</u>	<u>District</u>
1. Varanasi	Varanasi	8. Gorakhpur	Gorakhpur
2. Bhadohi		9. Mau Nath	Azamgarh
3. Ram Nagar		Bhanjan	
4. Rihand circle	Mirzapur	10. Mohemmdabad	
5. Mirzapur		11. Azamgarh	
6. Phulpur	Allahabad	12. Shahganj	Jaunpur
7. Handia		13. Faizabad	Faizabad
		14. Tanda	

Besides them many other smaller focal points are being developed in this region to provide impetus to the industrial activities to strengthen the economic structure of the region which is at present mainly based on its agriculture and allied sectors by the package of assistance in the form of loans, technical know-how, marketing facilities etc. being provided to them by the State Government through various institutions.

In the field of large scale Industries, Eastern Uttar Pradesh does not have a broad base except a few centres here and there, and sugarcane belt of Tarai where sugar industry has already developed. Churk and Dalla (for cement factories); Renukoot (for Aluminium and Chemical Factories); Shahupuri (for

Chemicals and Soda Ash Factories); Maruadih (for Diesel Locomotive Factory); Ram Nagar (for Glass Factory); Gorakhpur and Phulpur (for Fertiliser Factories) are some noted large scale industrial centres of this region. As such no major industrial landscape has emerged on this region. Only the Saryupar tract (for sugar industry) and the Mirzapur District (for cement and aluminium industries) can be said to have large scale industrial units. The Ganga-Ghaghra Doab of Eastern Uttar Pradesh, has no big centres of industrial activity. Some cooperative sugar factories have, however, been established in this region e.g. one each at Shahganj (Jaunpur District); Masauada (Faizabad District), Aurai (Varanasi District); Rasra (Ballia District), Sathianwa (Azamgarh District); and Nandganj (Ghazipur District).

The concentration of sugar industry in the Saryupar tract and establishment of some cooperative sugar factories in the Ganga-Ghaghra Doab are quite evident. "The most important factory for their locational pattern is the adequate supply of sugar cane which is a 'weight loosing material'.³⁴ Cheap labour is also easily available in this region because it is densely populated. The textile industry of this region is located in the Districts of Gorakhpur, Varanasi, Faizabad, Azamgarh and Mirzapur. The mineral-based industries have developed in the southern uplands (mainly in Mirzapur District) because of the availability of raw materials in that area and its adjacent regions. The cement factories of Churk and Dalla are based on local limestone deposits and other allied materials.

A third at Chunar is likely to be set up. The Hindustan Aluminium Factory located at Renukoot near Pèpri is based on the bauxite ores coming from Bihar. The Fertiliser factories of Gorakhpur and Phulpur and the chemical works at Shakupuri are dependent on the power supply received from the Rihand Obra complex. Engineering industries are confined mainly to the large cities due to their many sided attractions; the most important of them being the Diesel Locomotive Factory of Maruadih and the Railway workshop of Gorakhpur. Agricultural implements are made at a number of centres. The food processing industry ^{is well} has developed in the city and the District of Varanasi. Few centres are engaged in the manufacture of engineering products. Several new industries designed to manufacture agricultural implements, bicycles, blankets and photographic papers etc. ^{also} have built up their sites along the National Highway between Varanasi and Mughalsarai recently.

✓ The cottage and village industries such as those manufacturing handloom cloth, carpet, silk and artsilk cloth, wool products, brass-wares, calico-print materials, wooden lacquered articles, soap, matches, furnitures and ^{those} connected with Rice-husking, flour milling, oil milling, Rab, Gur and Khandsari making are widely spread over at centres located in small towns and villages of this region. The leather industry is mostly unorganised and is worked by the poor illiterate persons, generally on traditional basis, who manufacture shoes and other leather products with primitive techniques mostly for the peasantry.

Important handloom centres in this region are Varanasi, Mau Nath Bhanjan, Mubarakpur, Gorakhpur, Tanda, and Ghazipur. Besides them many other smaller towns and villages have won their traditional fame for well designed and artistic handloom products of various kinds. Some centres have attracted different kinds of institutions for the progress of cottage and village industries. "A weavers' Training Institute has been opened in Varanasi in view of the fact the in and around Varanasi, there is a carpet belt of world fame".* This institute will impart training to the new and young artisans for the carpet industry, an unit of which is being set up at Rae-Bareilly shortly in collaboration with a Swiss company for the manufacturing of tufted carpets. The carpets of Mirzapur, Gopiganj and Bhadohi, as also the silk fabrics of Varanasi, have earned international repute and their products are being exported extensively. Metal utensils of Mirzapur and Varanasi and potteries of Chunar and Nizamabad are also of great importance inside and outside this region.

The Rihand-Obra Power Complex has in fact introduced some visible changes in the industrial landscape of such places as Pipri, Chopan, Churk, Dalla, Robertsganj, Mirzapur etc. and surrounding areas. These centres are growing in size and functions and have attracted many people from Mirzapur and nearby Districts. Availability of cheap power, efforts for cooperative organisations of such centres, the government

* See an article by Sri S.K. Modi in Northern India Patrika with in its issue dated 3.3.1976.

assistance in finance, the technical help for research and improvement and marketing facilities for their products are some of the important factors which have provided new impetus for the faster growth of these and other industrial centres of the region in the field of a variety of industries. It is hoped the industrial wave originated thus will move up swiftly in shaping the industrial landscape of the region.

REFERENCES

1. Mookerjee, Radha Kamal. The Changing face of Bengal, Calcutta, 1938, pp. 233-234.
2. Cultural Heritage of India, Calcutta, 1960, Volume I, p.106.
3. Baden-Powell, B.H. "Village Communities in India" (London), Ed. 1899, pp. 52-53.
4. Singh, R.L. (Ed.): India: Regional Studies (Calcutta: Indian Committee for Geography, 1968), p. 59.
5. Census of India 1971. Paper I, Provisional Population Totals.
6. Census of India 1971. Paper I, Provisional Population Totals.
7. Geddes, A. Half a Century of Population Trends in India: A Regional Study of Net Change and Variability (1881-1931), Geographical Journal, Vol.98 (1941), pp. 228-252.
8. Singh, H.D. 'National Geographer, Vol. XII' "Growth and variation of population in Eastern Uttar Pradesh" December 1976, p. 196.
9. Davis, D.H. "The Earth and Man". Revised Edition, 1957. Chapter Two: Man: His numbers and Distribution, p. 16.
10. Singh, R.L. "India Regional Studies" "Eastern Uttar Pradesh Ed. 1968, Calcutta. Indian National Committee of Geography", p. 74.
11. Blasche, Videl De La "Principles of Human Geography" Reprinted 1952, Part I: Distribution of Population, p. 36.

12. Blasche, videl de. la. "Principles of Human Geography" Reprint 1951, p. 115.
13. Dickinson, R.E. "The scope and status of urban geography" Readings in urban Geography, Chicago, 1959, p. 17.
14. Mayer, M.M. and Kohn, C.F. "Readings in urban Geography" joint Indo-American Edition 1967. "A theory of Location for cities", pp. 203-4.
15. Singh, R.L. Banaras: A study in Urban Geography (Varanasi: Nand Kishore and Brothers, 1955).
16. Singh, R.L. Ballia - A study in urban settlement, National Geographical Journal of India, Vol.2, Part I (March 1956).
17. Singh, R.L. Two Small Towns of Eastern Uttar Pradesh (Sultanpur and Chunar), National Geographical Journal of India, Vol.3, Part I (March 1957).
18. Singh, H.D. "Growth and Distribution of Towns in Eastern U.P." National Geographer, Allahabad, Vol. IX, 1974, p.83.
19. Kostrowicki, J. Some Methods of Determining Land use and Agricultural Orientations as used in Polish Land Utilisation and Typological Studies; Geographia Polonica, No.18, 1970, pp. 93-120.
20. Bhat, L.S. Regional Planning in India, Statistical publishing society; Calcutta, 1972, Misra, R.P. (Ed): Regional Planning: concepts Techniques, Policies and case studies; Prasaranga, The University of Mysore, Mysore, 1969.
21. Weaver John C. Crop combination Regions in the Middle West; Geographical Review, Vol. XLIV, No.2, April 1954, p. 177.
22. Gaur, Kripa Shanker "Economic Development of Uttar Pradesh" Ed. 1970, Chapter VIII 'Animal Husbandry, Forestry and Fisheries', p. 95.
23. Kitaisky, Y.D. "Prospecting for minerals" Foreign Languages Publishing House, Moscow, 1965, p. 17.
24. Techno-Economic Survey of Uttar Pradesh, Ed. 1965, Chapter VI 'Minerals', p. 93.
25. Misra, Ram Narain "Uttar Pradesh", Ed. 1953, p. 35.
26. Yaseen, Leonard C. 'Plant Location' New York, 1956, p.77.
27. Jones Clarence, Fielden "Economic Geography", New York, 1947, p. 575.

28. INDIA: Regional Studies, Ed. 1968,^{by} Dr. R.L. Singh, Eastern U.P., p. 98.
29. Techno-Economic Survey of Uttar Pradesh, Ed. 1965. Chapter II Transport, p. 172, NCAER, New Delhi.
30. Mas Carenhas, W.X. Our Road Transport, an article published in the Major Industries of India, An Annual Publication, By N.P. Gandhi 1958-59, p. 225.
31. Ibid., p. 225.
32. Ibid., p. 225.
33. Industrial Programmes in Eastern Uttar Pradesh During Fourth Plan. Published by Directorate of Industries, U.P. Kanpur, 1965, Chapter IV - Criteria and strategy, p.11.
34. Singh, R.L. and Pannu, S. The Saryupar Plain - "A study in the Agro-Industrial Relationship", National Geographical Journal of India, Vol. III, Part 3 & 4, p. 113.

CHAPTER IV

THE DETERMINANTS OF OCCUPATION

THE DETERMINANTS OF OCCUPATION4.1. Introduction:

The concept and scope of occupation and its associated social status have undergone a continuous change throughout historical epochs. But man's attempt of obtaining a livelihood has always been affected both by (i) Environmental opportunity, and (ii) His stage of civilisation, because each of them imposes limitations on the range of his effective choice of economic activities. Therefore, man made his earliest living in very different ways from those of the present day. Probably he began with elemental activities of hunting, fishing and gathering of wild fruits, nuts and plant products. He through ages gradually built our present day complex economic structure with all its varied and inter-locking activities. Thus at early stage of civilisation human needs were simple and so occupations were also limited. But with the advancement of economic development and associated civilisation, his ever-increasing needs multiplied and so the complexity of occupations also increased.

Today a far-reaching division of labour and much more efficient techniques of production have made it possible not only to obtain more than just minimum of food, clothing and shelter but also to devote more time to non-material aspects of life. Therefore, economic activities, better termed as "occupation" with a broader sense of the term, may be defined

as various pursuits whereby man earns means to satisfy his economic, social and intellectual needs.

The caste system and family traditions demanding a rigid observance of hereditary occupation are still in vogue particularly in the rural areas of this country, characterised predominantly by the caste structured agricultural rural economy, although the introduction of industrial progress, trade and commerce has considerably revolutionised the traditional occupations and so the emancipation of occupation has come to the fore in the modern society. The present economy of a region is the result of a long process of evolution. Now occupation is not determined only by the birth of an individual in a particular caste or family engaged mainly in the pursuit of a particular traditional economic activity. Thus there is a big change in occupational relations and occupational structure. This change has cut across the relationship between occupation and the family to a very large extent.

Through the following elaborations an attempt has been made to discuss and evaluate the relationship that exists between the economic activities of the people of Eastern Uttar Pradesh on the one hand and its physical, social, cultural and personal environments on the other. Man in the modern society is not directly dependent upon certain local aspects of the physical environment alone. The exact occupations followed by him in a region are determined largely by his choice, either free or restricted, although within the limits imposed by the environment. So the environment is mainly a limiting factor only.

Nevertheless, a human factor in the process of the choice of economic activities must not be underestimated because man is a potent geographic factor who to a great extent is able to alter the natural environment. The elements of natural environment influence the society of which man is an important constituent. Since man is born and brought up in a society, his social, economic, cultural and personal environments play an important role in determining his means of livelihood i.e. occupation. These manifold environmental factors are indeed the 'Determinants of occupation' to a large extent.

Under the influence of environmental opportunity and his stage of economic development, man pursues an occupation according to his physical and mental capacity, efficiency, educational training etc. Therefore, the factors determining the individual's occupation may be conveniently grouped into two viz., (i) the internal factors; and (ii) the external factors. The internal factors play a pivotal role in one's choice of occupation according to his physical and mental capacities inherited from his ancestors, which are indeed modified, developed, and cultivated to a great extent by the opportunities afforded by the elements of external factors and so they form the elements of his personal environment. The external factors are primarily associated with the elements of his surroundings consisting of the physical, social and cultural environments which are basically variable but closely interconnected. The elements of internal and external factors may,

therefore, be conveniently grouped into the following:

(i) Physical; (ii) Social; (iii) Cultural; and (iv) Personal Environments.

(i) Physical Environment: It covers the various elements associated with natural environment, such as physiography, drainage, climate, soils, minerals, the biota etc.

(ii) Social Environment: It includes a number of elements constituting the society, such as caste, race, group or tribe religions etc.

(iii) Cultural Environment: It refers to the stage of economic development of a society in a region. It includes such factors as cultivation of land, artificial drainage lines, transportation system, industrial land-scape, rural-urban composition of population and the trends of urbanisation etc.

(iv) Personal Environment: It refers to such factors as age, sex, education etc.

4.2. Physical Environment:

The natural environment of a region is usually well reflected in the features of natural landscape of that region and this term refers to the land in its natural state with its various kinds of surface forms. Therefore, the elements of natural environment are the (i) Topographic conditions; (ii) Ground water and natural drainage; (iii) Climatic conditions; (iv) Soils; (v) Minerals; and (vi) Biota i.e.

(a) natural vegetation, (b) native animals and micro-organisms which are important factors influencing man. All these factors always guide and influence the economic activities of the people living in the region, although they can not wholly determine their economic activities. But indeed their effects are of primary significance in shaping, reshaping and determining the nature of one's occupation. However, the human beings "by virtue of their cultural capacity live largely outside the laws of animal ecology".¹

(1) Topographic conditions:

These conditions are more conspicuous among the factors of physical environment as they determine the suitability of a region for supporting its population because they influence the economic activities of its people. Topography, with its varied features closely related to the relief and surface configurations of a region means the forms of the surface of the earth with respect to both its horizontal outline and elevation. The slope and absolute relief are the two elements of surface configuration which are largely determined by the regional geological structure and history. Physiographically Eastern Uttar Pradesh is almost monotonous except its southern uplands which is a subregion of a dissected plateau with rugged topography.

If the slopes are steep, their soil cover will be shallow which will provide conditions unfavourable for agriculture. By contrast, if the slopes are gentle or the land surface is flat, the soil cover will be thick with its

probability of being more productive for crops. A flat surface will help in the development of other economic activities.

(ii) Ground Water and Natural Drainage:

The advantages of ground water are of much importance for man as it contributes significantly to the development of economic activities by supplying water for domestic, irrigational and industrial uses.

The surface water differs from ground water as a resource in a number of respects. The surface water of a region is found in rivers, lakes, ponds, tanks and swamps located within its limits. It exercises effective influence on human beings and their economic activities. During the earlier and ancient period of history, most of the human settlements preferred their locations near the river valleys and lake sites. Later on man gradually expanded and occupied the places even farther away from the water sites because in such places as well he found ways and means to support him. It will not be out of place to mention here that most of the great world civilisations grew in the river valleys, such as Indus Valley (India), Weiho valley (China), Nile Valley etc. Even in modern times most of the cities continue their locations at the confluence of or along or across the rivers e.g., London (on Thames), Varanasi (on Ganga), Allahabad (on the confluence of Ganga and Yamuna), Agra and Delhi (on Yamuna) etc. The flow of water on the surface is regulated by the natural drainage of a region.

The regions deficient in water supply are deprived of the advantages of location of large water consuming industries, such as steel mills, textiles, dyeing and finishing plants, paper mills etc., because they are preferably located near the sources of water i.e. rivers, lakes or reservoirs (natural or artificial). The establishments of such industries greatly encourage the diversification of economic activities of a region. Rivers or reservoirs also help in the production of mechanical power in the form of hydro-electricity which in turn drives the wheels of machines and encourages the industrial activities of the areas under command of such projects. The well known Rihand Project of Eastern Uttar Pradesh located in Mirzapur District furnishes a good instance.

In the fertile alluvial plains which are famous for agricultural production from times immemorial and are made of sediments brought down and deposited by rivers, the canals are taken out easily from such rivers to irrigate the cultivated areas even far away from them. Rivers and other water bodies of various forms also provide fishes to be consumed and used in many ways. They further serve as routes of transport and connect the places which are mostly otherwise unconnected by roads or rails. By providing easy and economical means of transport, they motivate the progress of trade and commerce. The importance of water bodies also lies in their attractiveness provided by their scenic and recreational beauties.

(iii) Climatic Conditions:

Climate not only affects the health but also the man's mode of life and adds to a great extent to the economic health of the region. Climatic conditions of a region influence and determine its human activities and the food, clothing and shelter of people living there. Agricultural production responds directly to climatic factors such as temperature, rainfall, sunshine and winds. Thus the crops grown in a particular region depend largely on the type of its climate. Therefore, in order to understand the economic life of the people of a region one should know the climatic conditions under which they make their living. The climate influences not only the production of agricultural crops and industrial raw materials but also their trade and commerce.

The place, where a certain domesticated plant thrives best is often virtually determined by climate and so the people grow the crops best suited to a region. The real economic significance of this fact, however, is that through surplus production of items for which a region is climatically best suited and its efficient transportation, such items become available even in those regions where they can not be grown because in exchange they import the needed materials which are not grown locally. The climatic dissimilarity¹¹ is, therefore, the fundamental basis of trade and commerce both national and international. Thus to a great extent the currents of trade's flow are in response to the climatic differences, because the climate helps in the growth and production of different kinds

of crops which human beings have exploited to their advantage differently in different regions. It has been aptly said that "of all the geographical influences to which man is subjected, climate seems to be the most potent".² However, man himself is more important and even more effective geographic factor than others. He has a tremendous capacity to adjust and adapt to the surroundings. According to Miss E.C. Semple, "man ranks among the most adaptable organic beings on the earth. No climate is absolutely intolerable to him".³

(iv) Soils:

Soil is of fundamental importance to the human beings as most of them are engaged in the pursuit of agriculture and its allied activities. It is, of course, the main source of all the man's food, clothing and his ever-increasing list of other needs and desires. Directly or indirectly all the food requirements of the vegetarians are made available through production of agricultural crops. Even in the case of non-vegetarians, the meat providing animals and also those providing milk products are reared on the food items produced through agriculture. Thus, the soil is the most important factor for human living as it determines the productive capacity of a region. If the soil is deep and fertile and the climate is favourable, man commonly avails of the opportunity to practice agriculture. On the contrary, if the soil is shallow and unproductive, and even if the climate is favourable, man pursues activities other than those associated with agriculture which

serve as the basis for moderate or even sparse population, whereas the former type of soil supports dense population as is seen in the case of the alluvial plains of Eastern Uttar Pradesh.

(v) Minerals:

Human civilisation has developed through stages based on the use of minerals. Modern industrial society with its complex economic structure depends mainly on such minerals because the tools, implements and machines are made of metals. The power minerals have helped wonderfully in the development of manufacturing activities, transport, communication, automobiles, television and even in the generation of atomic power. Thus the mineral wealth is the yard-stick of measuring the economic prosperity of a region because it immensely encourages the diversification^{of} its economic activities. As Eastern Uttar Pradesh is deficient in mineral resources, hence the mineral based industries are almost absent here and this has retarded the economic development and industrial progress of this region. Therefore, the economy of this region has little or no impact on the welfare of its people and^{so} it has remained an industrially backward and economically poor region of this state.

(vi) Biotic Elements (Flora and Fauna):

The study of flora and fauna relates to the analysis of biosphere consisting of the natural vegetation and the native animal life. The importance of these elements is due to the fact that they have been close associates of man since his

evolution on the earth. He found him surrounded with vegetation and animal life which influenced his activities to a great extent.

(a) Natural Vegetation (Flora):

The vegetation cover of a region has its own importance because it plays a vital role, through forest-based industries, in the development of the economy of that region, as the forest products are used in many ways providing employment opportunities to the local people who engage themselves in economic activities from felling of trees to the marketing of forest products for sale. Eastern Uttar Pradesh is, however, practically devoid of all native vegetation except some of its pockets found in the Saryupar subregion in the north and more expansive areas in the southern uplands.

(b) Native Animal Life:

The native animal life is very important next to human beings. Both have lived together and cooperated with each other in the development of human civilisation, although man first knew hunting of native animals and not their domestication. Animal culture and fish culture were foreign to him at that time. Gradually man realised their importance and started domesticating animals because he found that besides their meat and meat products they could provide him with milk and milk products also which were so conducive to human health, and that at the same time their wool, hides skins, fats and various other items could be used wonderfully to his advantage.

He also began to use them as draught animals. They proved an easy and convenient means of transport even in most difficult terrains. In the modern society man uses animals and their products in a number of ways.

From the preceding discussion regarding the role played by the individual elements of physical environment as the "determinant of occupation", it is apparent that each of them limits the range of effective choice of man's occupation materially. "Therefore the sum total of their influence on man assumes importance for it affects the distribution of population, his work, his economic activities, his social organisation and even his literature".⁴ However, within the limits of natural environment, the choice of man's occupation has a vital role to play as he modifies the surroundings in accordance with his needs. The elements of physical environment of this region have been discussed in detail in chapter II.

4.3. Social Environment:

The social environment is a wider term which includes every thing associated with man's society. As social being, man adjusts himself by creating and recreating an organisation, which guides him and also controls his behaviour in many ways. This organisation is called 'society' which to a certain extent liberates man and also limits his activities by setting up standards of work, behaviour and life to be followed and maintained by all.

The man as an individual of family is closely associated with his society and its surroundings, because family is a part of the society. Aristotle, a Greek philosopher said that man was a social animal. He significantly added further that a person who was incapable of sharing a common life was either below or above humanity ("either beast or God"). Thus a man lives in society in accordance with its norms. To a great extent his activities are guided and influenced by the social environment which consists of numerous factors. All these factors, however, do not have equal weight as determinants of occupation. It is difficult to enumerate all such factors. Therefore, only those important factors have been discussed, which have great influence on man's economically gainful engagements; such as his (i) caste; (ii) group or tribe or race and (iii) religion.

(1) Caste:

The word caste has been defined to mean "any of the distinct hereditary Hindu social classes, each formerly excluded from social dealings with others e.g. Brahman, Kshatriya, Vaishya and Sudra".⁵ It is important to note that caste is found not only among Hindus but also among Muslims, Christians, Sikhs, Jains, Buddhists and Jews. Therefore, the caste system is ubiquitous. It cuts across diverse groups and gives them a common platform. But by far the most significant example of caste system is one incorporated in the Hindu society. "Early Hindus necessarily belong to the caste of his parents and in

that caste he inevitably remains. No accumulation of wealth, or no exercise of talents can alter his caste status and marriage outside his caste is the arrangement of hereditary groups in a hierarchy".⁶

It has been claimed that the hereditary association of a caste with an occupation has been so striking that the caste may evidently be considered nothing more than the systematisation of occupational differentiation. Manusmriti, our old sacred literature also suggests this interpretation. Thus Manu describing man's creation states, "But for the sake of the prosperity of the world, he caused the Brahman, the Kshatriya, the Vaishya and the Sudra to proceed from his mouth, his arms, his thigh and his feet. But in order to protect this universe he assigned separate duties and occupations to those who sprang from his mouth, arms, thighs and feet".⁷ This indicates the intimate historical association between social class and the type of occupation and it further suggests that there was a harmonious combination of occupations based on the solid grounds of the division of work among the people suited to the reconstruction of the economy. The occupations of the upper two Varnas are clearly stated to be priesthood, and administrative and military duties respectively. The four major Varna categories however, did not exhaust all the occupations practiced. So various subcastes practicing different occupations such as those of goldsmiths, barbers, leather workers and potters etc. were developed in long course of time to meet the needs of the society.

(ii) Group or Race or Tribe:

"An ethnic group" is generally conceived to be one whose members share a distinctive social and cultural tradition maintained within the group from generation to generation, whether as a part of a more complex society or in isolation. This mode of social differentiation has its own distinguishing characteristics".⁸ Race is different from caste. It shows family's breed or descent. Race is a sociological category. It is often considered as a group biologically different from caste because it represents a common and distinctive heredity while the caste always rests on the differences determined at birth which can not be changed by individual's achievements (economic, professional or political) or by any other means.

Tribe is still different. It means a class in itself or a distinct class of people. Formerly it implied the groups of barbarous classes under recognised chiefs occupying places in isolation. But now a tribe means, a group of underdeveloped people having the same occupation habits, ideas etc., which has been far away from the rays of modern civilisation and whose economy is always adjusted to the opportunities provided and the difficulties placed by the physical environment. Of special significance is its economic calendar, which bears a testimony to its ingenuity in exploiting the gains of seasonal changes. Eastern Uttar Pradesh however, has not been important from this point of view as there were only 16,320 persons (1971) belonging to schedule tribes in this region. Their number is indeed quite small as compared to other castes of significance.

Usually a tribe means a group of people with no permanent home, who move about from one place to another practically throughout their lives in search of livelihood by following different activities of varied nature. The tribal people are predominantly ruralised and they usually live away from the permanent settlements. Their occupational pattern is neither advanced nor diversified. But remarkable feature of their economy is the division of labour, which offers ample opportunities to all the members of a family to contribute their share to the domestic property.

As a rule, a tribal mostly follows the economic pursuits of subsistence type based on meagre cultivation of land around his settlement. During offseasons he engages himself in the collection of fruits, wild nuts and roots or in hunting of birds and prey-animals, or in fishing. Sometimes he follows other economically profitable occupations also such as basket-making, repairing of old traditional agricultural tools, domesticating milk animals etc. Some of them earn their livelihood by reciting heroic deeds or love affairs of the people mentioned in legends, moving about in the villages or the nearby towns. Different tribes are influenced in different degrees by the present day civilisation. Even the different sections of the same tribe may not be uniformly so influenced.

(iii) Religion:

Among the elements of social environment influencing the occupational distribution of population in a region,

religion is also important. The term 'religion' is quite wide. Among Hindus, its equivalent is 'dharma'. "It is truth's embodiment in life and power to refashion our nature".⁹ Numerically the two religious groups i.e. Hindus and Muslims form the majority of the people living in Eastern Uttar Pradesh. They follow Hinduism and Islam as their religions respectively.

It would be in fitness of things to mention here as to how a religion or a caste has imposed limitations on the choice of occupation of the people. In this respect it is worthwhile to mention the comments of Kingsley Davis to the effect that "in the field of agriculture (India's most important means of livelihood) technological advance is restricted by caste restrictions on the type of labour by hereditary taboos, by virtual values of the dung and by the veneration of the cow. Even in the field of medicine, the progress is retarded by religious taboos or the treatment of women by male physicians; the prejudice against women entering the nursing profession; the definition of mid-wifery as unclean an occupation; and taboos on contact with dead bodies and hence dissection. Economic advancement is handicapped by the Muslim taboos on money-lendings, heavy borrowings for ceremonial rather than for production purposes, by obligation with joint family and by occupational restrictions on caste and religion".¹⁰

The numerical strengths of population by different religions have not been uniform from one census to the other and hence no comparison on that basis is possible. The 1931 census of India classified its population under ten religious

groups. The 1961 and 1971 censuses of India, however, classified its population into seven religious groups i.e. those of Hindus, Muslims, Sikhs, Jains, Christians, Buddhists and others. No material changes appear to have taken place in the religious composition of population of Eastern U.P. during the last two decades as per Censuses of 1961 and 1971. The details are analysed in the table IV-1.

Of the total population of this region in 1961, 87.50 percent were Hindus and 12.39 percent Muslims. These two dominant religious groups together accounted for 99.89 percent of its population, while all other religions together 00.11 percent only.

An analysis of the population of Eastern U.P. classified by religions in the rural and urban areas shows many unique features of social structure. It is worth while to notice the relationship which exists between the religions and the rural and urban population, literacy and occupational affiliations. The Hindus and Muslims are predominantly rural but the relative percentage of Muslims in the urban areas is higher than that of Hindus. The population belonging to other religious groups is highly urbanised. Among the religious groups, Hindus are very predominant but relatively the least represented groups of Sikhs, Jains, Christians and Buddhists are very much urbanised in this region. Of the total urban population of Eastern U.P. in 1961, 69.37 percent were Hindus, 29.51 percent Muslims, 0.70 percent Sikhs and 0.30 percent Christians.

In smaller religious groups, literacy rate is higher

Table IV-1

Population of Eastern Uttar Pradesh classified by religious groups into rural and urban categories (as per Census of 1961)

Name of the religious group	Total population	Rural Population		Urban population		Percentage of each religious group in Eastern U.P.	
		Number	Percentage	Number	Percentage	Total population	Urban population
1. Hindus	23343102	22189001	95.06	1154101	04.94	87.50	88.71
2. Muslims	3305763	2814933	85.15	490830	14.85	12.39	11.25
3. Sikhs	14082	2547	18.09	11535	81.91	0.05	0.01
4. Christians	10188	5249	51.52	4939	48.48	0.039	0.02
5. Jains	1895	531	28.02	1364	71.98	0.008	0.007
6. Buddhists	840	110	13.10	730	86.90	0.0036	0.002
7. Others	57	22	38.60	35	61.40	0.004	0.001
Total	26675927	25012393	93.76	1663534	06.24	100.00	100.00

Source: Figures are based on the District Census Handbooks of all the Districts of Eastern Uttar Pradesh, 1961.

due to their urban living and relatively more engagements in activities of trade, commerce and services. Being more urbanised they get better opportunities of being educated in schools and colleges of the towns. As regards the occupational affiliations of the various religious groups, the study made by Dr. Vikash Misra in his book "Hinduism and Economic Growth" (1962, Bombay)¹¹ is very significant. He made a study of the occupational pattern of different religious groups in India and concluded that the occupational distributions of Parsis, News and Jains were much advanced but not diversified, those of Hindus and Muslims were more diversified but relatively less advanced, while the tribal pattern was neither advanced nor diversified. His analysis shows that the minority religions are advantageously situated so far as the occupational distribution of their population is concerned. They have done better in economic fields, especially in trade and commerce. In Eastern Uttar Pradesh it is quite true, especially in case of Sikhs and Jains.

In case of Christians, particularly in respect of recent converts, the conversion was followed by intensive efforts to educate them and to find employment for them. The money power and political influences commanded by foreign missions enabled them to provide employment to the converts in a variety of occupations.

Thus it is seen that the elements of social environment, particularly the caste and religion, play a vital role in the choice of occupation of the people of Eastern U.P. which

is inhabited by the population composed of various castes and religions in its rural as well as urban areas. How far the traditional occupations are abandoned by the respective castes, how far they have lost their charm of orientation to the villages as rural occupations by becoming outmoded or uneconomic and to what extent the resulting dislocations are being adequately or properly adjusted, in the modern society are the questions of vital importance to all of us. There is a transition which is expected to transform itself into a kind of new class or even a classless society. For a systematic study in this respect, the discussion has been divided into the following subsections: (i) The caste, religion and occupation; (ii) The scheduled castes and scheduled tribes, and (iii) Future of castes and religions.

(i) The caste, religion and occupation:

To associate a caste invariably with a single occupation is an over-simplification, as even agriculture means a variety of things: land ownership, tenancy and labour: each is practiced exclusively or in combination with others. Occasionally it is found that different members of a family have different occupations. All women have homework and some of them also take part in agriculture. Women of artisan castes in addition, participate in the caste craft also. Occupations are classified into high and low categories also. Those practised by high castes or regarded as of high category. Manual labour is generally looked upon as low work and certain

occupations like swine-herding, butchery etc. are considered to be polluting and of very low category.

The castes are seen to cut across all the religions. Among the important castes of Eastern U.P. are those of Brahmans, Kshatriyas, Vaishyas, Kayasthas etc. Brahmans have special significance in this region with city Varanasi as the ancient centre of Brahmanical Hinduism and many of them follow priestly vocation. Some of them are land holders and are agriculturists also. Others are in learned professions and some are in business as well. The Bhumihars, who also call themselves as Brahmans are mostly agriculturists and they hold more land than the members of other castes and are good cultivators in many ways.

Kshatriyas or Rajputs held an important position in this region as they were the chief land owners or Zamindars. The principal occupation of the Rajputs of this region is agriculture. However, they also serve in large numbers in the army and the police. With the spread of education among them, many have entered the fields of trade, commerce and other professions also.

The Vaishyas are generally traders and businessmen. They include most of the wealthy persons of the society as bankers, merchants and even land holders. With spread of education among them many have entered into other professions also like law, medicine, teaching etc. and some of them have opted for services as well in public or private sectors.

The Kayasthas whose number is small in this region, have taken up the learned professions, predominantly. Many of them are engaged in government as well as private services. Some of them have taken up other professions also. In Eastern U.P., Khattris are found in a small number, mostly concentrated in urban centres. Generally they are business men trading in variety of goods such as, sarees, brocades, silks, jewellery etc. some of them are engaged in money lending and banking also. Few of them are big landlords and property holders also, who have mostly settled in cities like Varanasi, Gorakhpur, Faizabad etc.

There are certain other castes as well, which are although lower in hierarchy, yet hold dominant positions in their respective localities. Most of them, belong to backward classes, such as, Ahir, Koeri, Muroa, Kurmi etc. The Ahirs are good agriculturists, although they generally follow their traditional occupation as graziers and cattle breeders. They belong to Gwalbans, a sub-caste, which is very dominant.

The Koeris are regarded as the best cultivators and the Kachhis and the Muraos also belong to the same class. The Koeris are mostly confined to the Varanasi and Gorakhpur Divisions and the Muraos are associated with Soraon tahsil of Allahabad District. Numerically they are a strong group of cultivators. They also work as gardeners and agricultural labours.

The Kurmis are mostly concentrated on the right bank of the river Ganga, in the District of Allahabad and they hold

a position of importance next only to Brahmans and Kshatriya. They are found in smaller groups in some other parts of this region as well but there they are so significant as land owners and good agriculturists. Financially they are quite well off.

There are many other important castes in this region, which are associated with the lower ranks of the society belonging to the backward^{or} Sudra categories. Among such Hindu castes, Lonia, Rajbhar, Gonda, Kewat etc. are important. Besides, there are many artisan castes also, which follow their traditional hereditary occupations even today. In addition, they practise some agriculture also to supplement their incomes. Among such artisan castes those of Dhobi, Kumhar, Teli, Dhuniya, Nai, Lohar, Sonar, etc. (i.e. Washerman, Potter, Oil man, Cotton Carder, Barber, Blacksmith, Goldsmiths etc.) are important.

Next to Hindus, Muslims are numerically important in Eastern Uttar Pradesh as they constituted 12.39 percent of the total population of this region. Islam proclaims the ideal of equality to all those who profess this faith but in India it has also been characterised by a sort of castes. In Uttar Pradesh those Muslims who have a tradition of foreign ancestry (like those from Iran and Arabia) are called Shurafa or Ashraf and are considered to be highest in hierarchy. After them come the converts from high caste Hindus such as Rajputs, Bhumiars etc. Next come occupation castes among Muslims, such as the Julaha (weaver), the Darzi (Tailor), the Bhisti (waterman), the Qusab (Butcher), the Bhatlari (Inn-keeper), the

Manihar (Mahar or seller of Glass bangles), the Kunzra (vegetable seller) etc. are worth mentioning.

Equality is a tenet of Sikhism also but that has not prevented the existence of castes in it as well. Sikhs are broadly divided into Sardars and Mazahabis, the former consisting of high castes and the latter of low castes (like sweeper etc.). The Sardars include Jat and Kamboh (land owners); Tarha (Carpenter); Kumhar (Potter); Mehra (Water carrier); and Cimba (Washerman). The Mazhabis not only came from low castes but were converted to Sikhism later than the higher caste groups. Then there exists one more group known as Sansi (Shepherd). Sansi converts to Sikhism rank even lower than Mazahabis.

Caste divisions occur among Indian Christians also, both in Catholics as well in Protestants. But a Catholic Brahmin would marry one other than a Catholic Brahmin. Social life among Christian converts is more free than among Hindus.

A large number of Muslims are landowners and good cultivators. They have also entered the occupations of trade and commerce, law, medicine, service etc. Cotton textile as a rural craft is mostly credited to Julahas and Ansaris among the Muslims.

As regards the descriptions available in the Census Reports of India in respect of caste-occupation relationship, the name of Herbert Risley¹² is the first to be mentioned, who studied this relationship in detail. His conclusion indicated

the castewise composition of occupations but mentioned little about the relative strength of different castes. Further, Mr. Chapeker¹³ wrote that every community preferred service to its traditional work. But that is not true at present. The persons engaged in the manual work are now preferring white collar occupations associated with industries, trade, commerce and services.

Most of the traditional occupations are now not so gainful as the modern ones. Hence many of the artisans are either leaving them or following them ^{with} some improvements so as to make them gainful. The traditional pattern of working of the artisans is now loosing its old charm rapidly, ^{and} speedily with the spread education and technological knowledge in recent decades. However, there exists a closer relationship between the artisan castes or communities and the rural crafts in Eastern Uttar Pradesh. These crafts are those practised by the artisans mostly in their own houses on the traditional pattern, utilising generally the locally available raw materials for manufacturing the articles usually meant for local consumption. The raw materials used are sometimes brought from long distance also while some of the manufactured goods also find their markets even at distant places. These rural crafts are carried on usually by the family members themselves inclusive of the females and the children. Among such rural crafts those connected with the manufactures of (1) cotton textiles, (2) Silk textiles, (3) Potteries, (4) Baskets, (5) Brass and copper wares, (6) Wool^len blankets, (7) Wool^len carpets, and (8) Leather footwears are very important in

Eastern Uttar Pradesh. The details of persons of main artisan castes or communities are provided in the following table.

Table IV-2

Persons of the artisan castes or communities engaged in the rural crafts in Eastern Uttar Pradesh, 1961.

Name of the rural craft	Main artisan, castes or communities engaged	Raw materials used	Name of the districts in order of numerical strength of persons engaged
1. Cotton textile manufactures	Julaha, Muslim, Dhunia and Ansari	Cotton yarn	Basti (19,170), Azamgarh (7,270), Faizabad (6,258), Ghazipur (3,647), Pratapgarh (2,894), Gorakhpur (2,583), Sultanpur (1,871), Ballia (1,694), and Gonda (1,411).
2. Pottery work	Kumhar	Clay	Jaunpur (6,996), Faizabad (5,451), Sultanpur (6,101), Gorakhpur (3,849), Ballia (3,504), Pratapgarh (3,152) and Basti (3,126).
3. Woolen carpet making	Julaha and Dhunia	Wool	Varanasi (12,094), Jaunpur (2,850), Mirzapur (1,822), Allahabad (118), Gorakhpur (38), and Faizabad (12).
4. Leather work and footwear manufactures	Chamar and Muslim	Hide	Sultanpur (2,758), Ghazipur (1,209), Faizabad (1,002), Mirzapur (889), Ballia (719), and Basti (613).
5. Silk textile manufactures	Julaha	Silk	Varanasi (7,514), Mirzapur (660), Pratapgarh (485), Azamgarh (115), Jaunpur (59), and Faizabad (58).

Contd.

6. Basketry work	Bansphor, Dom and Dharkar	Bamboo, Arhar, Jhau	Jaunpur (971), Sultanpur (903), Gorakhpur (444), Faizabad (411), Ballia (319), Pratapgarh (268), and Gonda (263).
7. Woolen blanket making	Gaderia	Rough wool	Deoria (533), Ghazipur (360), Sultanpur (308), Ballia (216), Gorakhpur (200), Azamgarh (178), and Basti (135).
8. Brass and copperware manufactures	Thathera, Kasera	Brass and Bell metals	Sultanpur (260), Allahabad (186), Deoria (76), and Basti (47).

Source: District Census Handbooks, 1961. *Such figures for 1971 were not available.*

A perusal of the above table and the other relevant details contained in the District Census Handbooks in respect of the artisan castes or communities practising rural crafts mostly indicates the great importance of the artisan castes in Eastern Uttar Pradesh due to whom the rural crafts have developed in the respective Districts of this region. In the beginning, these crafts were the privilege of certain castes and their families only but gradually others also joined hands with them to earn their livelihood in addition to the main activities of their families. Therefore, besides the artisan communities others have also entered into these occupations, particularly in the field of woollen carpets and silk industry.

Some rural crafts such as those connected with leather footwear, pottery, basketry and cotton textiles are quite

popular and are practised in almost all the districts of Eastern U.P. On the contrary the carpet making and silk industries as rural crafts could not be so popular and were developed in selected areas of the region only. For example, woollen carpet making industry is concentrated in a belt in and around Bhadohi in Varanasi District and in some areas of the adjoining Districts of Jaunpur, Mirzapur and Allahabad. The silk industry as a rural craft has flourished at scattered centres in the Districts of Varanasi, Mirzapur, Pratapgarh, Azamgarh, Jaunpur and Faizabad.

Among the rural crafts, as regards the relative numerical strength, pottery is almost the monopoly of Kumhars, while the woollen blanket industry is monopolised mostly by the artisans of Gaderia caste. Bansphors, Dharkars and Doms have specialised in basketry while the Thatheras and Kaserwas are the chief manufactures of brass and copper wares. Chamars and Muslims were predominant in making the leather footwears. Julahas, Dhuniyas and Ansaris were largely associated with the cotton textile, silk textile and woollen carpet industries. Despite the close association between the artisan castes and their rural crafts, the economically more lucrative rural crafts such as woollen carpet making and silk textiles have attracted many more persons from other castes also who are carrying on the crafts quite satisfactorily. Efforts should be made to develop these crafts so as to provide economically gainful employment to many more persons from all castes in the near future.

However, it would not be out of place here to quote the following findings of Noel, P. Gist, "while it appears that the upper and better educated castes are in general less rigidly bound to the traditional occupations than are the low castes yet their occupational interests are somewhat unidirectional, because strong taboos still exist against the performance of manual labour. In other words, high caste individuals, while free to make vocational choice within the limit of respectable and dignified white collar occupations, are commonly unwilling to accept employment at tasks involving manual labour. Hence the inter-occupational mobility of the upper castes tends to be mainly into non-manual jobs".¹⁴

Even in the modern advanced societies like those of Englishmen and Americans, the valuation of occupation has been characteristic feature of their social structure and social psychology. There had been a somewhat fixed or rigid relationship (rather inflexible) between the castes and social groups and the hierarchy of occupations or groups of occupations in the traditional society of India till the 19th century. Even the 20th century "in changing socio-cultural and politico-economic environments of the country, witnesses the institution of caste, seen at its strongest in rural areas and retains a fundamental role in contributing to the character of Indian society".¹⁵

(ii) The Scheduled Castes and Scheduled Tribes:

Scheduled castes and scheduled tribes together

Table IV-3

Growth sex-ratio and urban composition of population of scheduled castes and tribes in Eastern Uttar Pradesh during the period 1951-71.

Name of the Districts/region/ state	Number of SC and ST 1971	Proportion of SC & ST to the total population		Sex ratio No. of females per 1000 males 1971	Percentage of SC & ST to total urban population 1971
		1951	1961		
1. Bahraich	304,527**	13.60	17.70	861	04.40
2. Gonda	388,677	07.68	18.35	904	07.10
3. Faizabad	465,524	17.20	24.35	970	09.00
4. Sultanpur	392,769	16.04	23.79	987	09.50
5. Pratapgarh	302,013	21.78	20.80	1100	06.40
6. Basti	608,171	19.70	20.08	930	15.90
7. Gorakhpur	649,867	20.59	19.97	960	08.10
8. Deoria	439,181	13.59	15.01	987	08.70
9. Azamgarh	697,263	23.32	24.46	1060	07.70
10. Jaunpur	420,648	17.01	21.15	1072	09.20
11. Ballia	221,537	13.49	12.84	973	07.80
12. Ghazipur	297,336	21.47	18.03	937	11.30
13. Varanasi	497,971	17.17	17.36	940	08.60
14. Mirzapur	519,296	28.09	34.19	940	13.40
15. Allahabad*	234,391	19.26	22.76	975	12.00
E.U.P.	6441,091	17.72	20.34	972	09.01
U.P.	18747,481	18.16	19.44	896	11.40

* Allahabad means only three tahsils of Soran, Phulpur and Handia only.

** The total scheduled castes and tribes population of E.U.P. in 1971 included 16,320 persons of scheduled tribes.

The calculation is based on (i) The Census of India Report, 1951 (Uttar Pradesh), Part II-C, pp. 57.8 to 596, social tables.

(ii) The District Census Handbooks, 1961 based on the report of Census of India, 1961 (Paper No.1: Final population totals published in 1962).

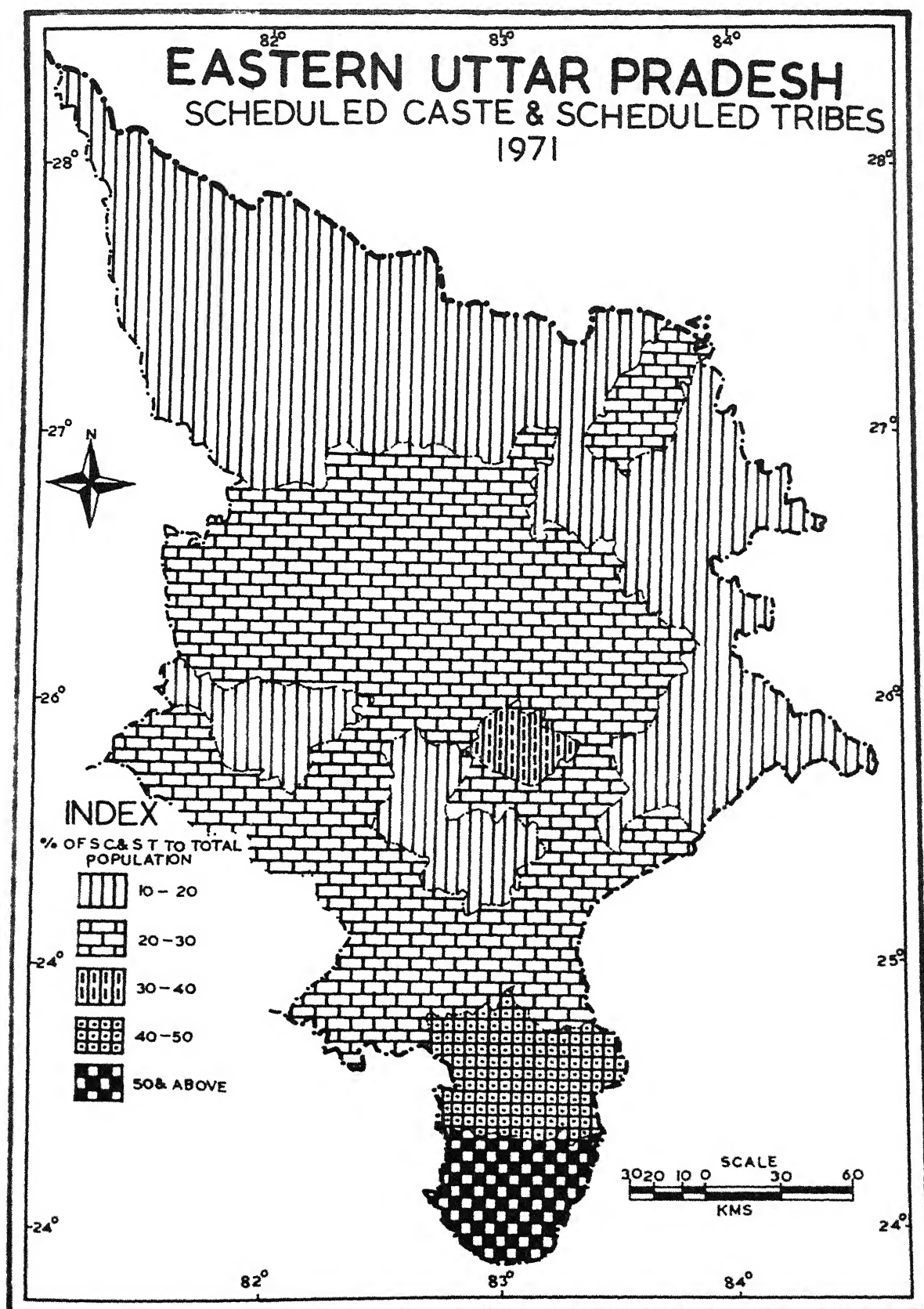
(iii) The report on the Census of India, 1971, series 21 (Uttar Pradesh), Part II-A.

constitute 20.61 percent* of the total population of Eastern Uttar Pradesh, which compares well with 21.20 percent of whole Uttar Pradesh. According to 1971 Census there were 16,320 persons belonging to scheduled tribes in Eastern Uttar Pradesh. Their number was indeed quite small as compared to that of the scheduled castes (16,424,771 persons). The total number of both of them together was 6,441,091 persons. Therefore, on an average about 20 percent of population of Eastern Uttar Pradesh belongs to the scheduled castes and tribes. Since they form a major group of castes in this region, having much bearing on its occupational distribution of population, hence it would be significant to make a detailed study of that group as given in table IV-3.

The distribution of scheduled castes and tribes population analysed at the tahsil level revealed more variations. In 1971, it varied from a maximum of 54.15 percent (for Dudhi) to a minimum of 11.2 percent (for Bansdih). Dudhi was followed by Robertsganj (45.10 percent) and Lalganj (31.40 percent). The distributional pattern of scheduled castes and scheduled tribes has been depicted in fig. 18.

The scheduled tribes were recorded separately for the first time in the Census of 1971, with 16,320 persons in Eastern Uttar Pradesh. Tahsil, Balrampur alone had 7,693 persons i.e. accounted for 49.30 percent of their population. Among the other tahsils, Nanpara (with 1,668 persons and 9.8 percent), Mohemmdabad (with 1,165 persons and 6.9 percent),

* Census of India, 1971, Series 21, Uttar Pradesh, pp.438-527.



Pharenda (with 1,006 persons and 6.20 percent); Dudhi (with 955 persons and 5.8 percent) and Mirzapur (with 618 persons and 3.8 percent)* were noteworthy. Hence numerically tribes are important only in a few tahsils of this region. In other tahsils, their number is nominal. The tribes constituted 0.25 percent of the total population of Eastern U.P. as against 0.20 percent of the whole U.P.

Now it is worth while to study the caste-composition, sex ratio and the rural-urban composition of the scheduled castes and scheduled tribes because they have great impact on the occupational distribution of population in Eastern U.P. Among the castes, Chamar, Pasi, Dhobi, Kori, Khatik, Dusadh, Kol, Musahar, Gond, Kharwar, Bhuiyar, Beldar, Majhwar, Hela, Nat, Baheliya, Dom, Kanjar, Badhik, Bhantu, Bonsphor, Balahar and Shilpahar are more significant in this region. Chamars constitute their majority in almost all the Districts (except Gonda, where Koris are predominant), although they vary widely from a maximum of 85.3 percent (in Azamgarh) to a minimum of 14.1 percent (in Gonda). They mainly live in rural areas. Some of them follow their traditional occupation of shoe-making as a rural craft. They hold little or no land mostly and work as agricultural labourers.

The next in importance are Dhobis, Koris, Khatiks and Dusadhs. As Chamars, Dhobis are found in almost all the Districts but other scheduled castes are not so widely distributed in this region. Some of them in addition to Chamars and

* Census of India, 1971, series 21, Uttar Pradesh, Part II-A. General Population Table, pp. 438-527.

Table IV-4

Castewise composition of total scheduled castes and tribes in percent.

Name of the District	Chamar	Pasi	Kori	Dhobi	Kha-tik	Bhu-iyar	Mus-ahar	Del-dar	Du-sadh	Hela Nat	Bans-phor	Cond	Khar-war	Kol
Bahraich*	35.8	26.4	19.8	10.4	5.2	-	-	-	-	-	-	-	-	-
Gonda	14.1	17.9	46.1	8.1	4.6	4.7	-	-	-	-	-	-	-	-
Faizabad	55.5	14.6	19.6	5.0	-	-	-	-	-	-	-	-	-	-
Sultanpur	38.8	18.6	34.1	4.3	-	-	-	-	-	-	-	-	-	-
Pratapgarh	43.5	42.3	5.7	5.0	-	-	0.70	-	-	-	-	-	-	-
Basti	74.6	5.0	2.9	10.0	2.0	-	-	2.0	-	-	-	-	-	-
Gorakhpur	67.4	12.8	-	2.8	2.0	-	-	5.2	-	-	-	-	-	-
Deoria	68.7	-	-	10.1	2.5	-	3.3	-	7.8	-	-	-	-	-
Azamgarh	85.3	5.9	-	3.6	2.2	-	-	-	-	-	-	-	-	-
Jaunpur	75.1	11.9	-	4.4	2.8	-	4.0	-	-	-	-	-	-	-
Ballia	73.7	-	-	5.8	-	-	0.8	-	14.2	0.7	0.6	0.5	-	-
Ghazipur	82.4	2.6	-	3.6	-	-	3.4	-	4.0	-	-	-	-	-
Varanasi	71.4	-	-	3.7	3.9	-	5.3	-	2.5	-	-	-	-	-
Mirzapur	38.0	3.3	-	2.4	2.5	-	4.1	-	-	-	-	8.8	6.7	15.4
Allahabad	36.2	38.8	3.9	5.1	2.4	-	-	-	-	-	-	-	-	6.9

Source: Figures are calculated from the Census of India, 1971.

Dhobis, such as Bhuiyars, Bansphors, Khatiks, Doms etc. hold their importance as artisan castes. Most of the members of the scheduled castes are generally rural labourers. Their economic condition is unsatisfactory, because their hereditary occupations have become, unremunerative.

The sex ratio among scheduled castes population was all along higher than this state's averages of 1951, 1961, 1971. In 1971 the sex ratio varied at the District level from a maximum of 1,100 (for Pratapgarh) to a minimum of 861 (for Bahraich). Among the districts Azamgarh and Jaunpur recorded sex ratio more than 1000, while all other maintained less than 1000 in 1971.

The scheduled castes and tribes are greatly concentrated in the rural areas of this region as elsewhere in India. Only 3.90 percent of their population lived in towns as against 7.06 percent urban population (average) in the region in 1971. They constituted 9.01 percent of the total urban population of Eastern U.P. as against 11.40 percent of the whole of Uttar Pradesh. At the district level their percentage of urban population varied from a maximum of 15.90 percent (in Basti) to a minimum of 4.40 percent (in Bahraich).

As regards the proportion of scheduled castes and tribes at the individual urban centre level, it varied from a maximum of 41.7 percent (in Morikundi), followed by Saidpur (25.8 percent), Chandauli (21.1 percent), Ahraura (19.2 percent) etc. to a minimum of 3.3 percent in Bhinga.

(iii) Future of Castes and Religions:

The industrialisation, urbanisation and the western education have weakened the influence of castes and religions which are loosening their grips due to changes and transformations in the social structure. Despite this Indian society is still stratified to a great extent along the lines of castes and classes. To bring about significant changes in the social structure a systematic programme of action in this respect must be made and followed for a long period of time.

The task of transforming the old rigidly stratified society into the modern egalitarian one is indeed a difficult task. It is quite encouraging to note that in recent times, the persons belonging to different castes and religions meet at common platforms to solve their problems. Special cells have now been opened in all the Departments of the Central and the State Governments for the implementation of such programmes, which would help the poor and the weaker sections of the society, especially, the scheduled castes and tribes irrespective of the religion, which they follow, to improve their lot.

4.4. Cultural Environment:

Cultural environment plays a valuable role in influencing and guiding the pattern of human occupation and the man's gainful engagement in different economic activities in a region. The stage of economic development and cultural progress determine the opportunities for engagement of population, because the diversification of activities depends to a great

extent on them.

The "cultural environment is composite of those features of the landscape which reflect man's activities. It includes such elements as cultivated fields, artificial drainage lines, buildings, transportation system and man himself".¹⁶ In a region the nature and extent of economic activities depend to a certain degree on the number of man as he is the originator of all economic activities in a region.

To sum up the above details all the elements of the cultural environment may conveniently be grouped under:
(i) agriculture and allied activities; (ii) urbanisation and the economic development of a region; (iii) the industrial development and technological advancement; (iv) development of power resources; and (v) the net work of means of transport and communications. These factors of cultural surroundings determine considerably the economic characteristics of the people in a region.

There is a close relationship between industrialisation and urbanisation. Modern industries cannot develop unless there are adequate economic overheads which are available mostly in the big towns and cities. Urbanisation is thus both a cause and an effect of industrialisation. Professor Kingsley Davis in a seminar on urbanisation in India held at Berkeley in California (U.S.A.) pointed out that it was not possible to have industrialisation without urbanisation. Thus the processes of industrialisation and urbanisation are now concurrent and they determine the stage of cultural progress in a

region to a great extent.

Individual elements of environment have their own importance as they influence the economic activities of the people in a region in their own way and separately from each other. But collectively all the elements of cultural environment exert much more influence on the pattern of human occupation and the occupational structure of population because they dictate the terms of economic activities of the people in a region.

The elements of cultural environment of this region have already been discussed in detail in ~~the~~ chapter III - "The Human Base and Geonomic Foundations" of this work.

4.5. Personal Environment:

Personal environment is one of the important factors which guide and determine the occupational structure of population. As the term implies, it includes such characteristics as (i) Age; (ii) Sex, and (iii) Education and Training, which are personal aspects associated with the individual.

(i) Age:

Age is the basic aspect of personal environment which determines the individual's physical capacity for occupational work and so also the occupational distribution of population in a region. The age structure of population determines the total number of persons available for engagement into various occupations but all such persons donot enter into the working

force of a region because every one of them cannot be engaged in gainful economic activities due to physical, mental or other defects. The entire working population cannot also be employed due to shortage of jobs.

Children below the age of 14 years being tender in constitution are incapable of undergoing physical or mental burden and hence they cannot be entrusted with the jobs of responsibility because of their immaturity. Likewise the persons of the age group beyond 60 years become too weak to undertake the activities requiring strain because of their old age and weak health. Since these persons have worked in their mature age, they would now like to retire from hard work and take rest for the remaining period of their lives unless they are forced by the economic conditions to undertake some job to supplement their income for supporting their families. The persons falling within the age group 15-60 years are generally physically and mentally suitable for jobs and hence are available for participation in different economic activities to contribute their share towards national income and also for providing livelihood for themselves and for their families.

Now it is quite clear from the above discussion that the population ~~upto~~ 14 years of age is treated as 'children' and is not available for labour force under the provision of Factories Act, while the population in the age range from 14 to 60 years is mainly available for participation in the labour force and is therefore, called 'the Effective Population'. Hence the part of population, which is generally engaged in producing goods and rendering services and is willing to offer

itself for work in the labour market, forms the mainlabour force of a region. Theoretically the population in the age range from 14 to 60 years, called as the 'effective population' should usually correspond with that population, which is actually participating in the labour force of a country but in practice it is not so. The population actually participating in the labour force is called 'the working population'. In reality the effective population is different from the working population. Thus on eligibility and actual participation in the labour force, there are three broad categories of population viz., (i) Total population; (ii) The Effective Population; and (iii) The Working Population. The following table gives the details of these categories of population in the post-independence period for Eastern Uttar Pradesh.

Table IV-5

Classification of Population of Eastern Uttar Pradesh,
1951-1971

Census years	Total population	Effective population	Working population
1951	23,496,163	54.10%	47.40%
1961	26,675,927	52.20%	42.60%
1971	31,246,589	51.80%	31.30%

Source: Censuses of India, Uttar Pradesh, 1951, 1961 & 1971.

A perusal of the above table indicates that the effective population of Eastern Uttar Pradesh in the age range from 14 to 60 years has decreased from 54.10 percent in 1951 to

52.20 percent in 1961 and further to 51.80 percent in 1971. which compares well with 51.40 percent for the whole of Uttar Pradesh in 1971. This declining trend is mainly due to a fast growth in population together with more longevity of life in recent years. The working population of Eastern Uttar Pradesh shows a percentage decline of wider range as it decreased from 47.40 percent in 1951 to 42.60 percent in 1961 and further to 31.20 percent in 1971. This also compares quite favourably with 30.90 percent for the whole of Uttar Pradesh. This decline in the proportion of the working population is due to the changing definition of a 'worker' from one census to the other.

Above analysis clearly speaks that all the eligible persons donot participate in the labour force of this region. It is also found that some below the age of 14 years and above the age of 60 years also participate in the labour force of this region. This makes the situation worse.

Now it will be worthwhile to study and analyse the variations in the 'effective' and 'working' population of Eastern Uttar Pradesh at the district level. They are shown in the Table IV-6 and their trends point out their comparative growth during the post independence period. It is quite evident that the growth rates of population in Eastern Uttar Pradesh have not been steady and uniform from one decade to the other as elsewhere in India. The variations recorded by any district donot correspond to the average for this region.

The percentage decrease in the working population among the Districts of this region is of considerable

Table IV-6

Percentage Distribution of Effective and Working Population of Eastern Uttar Pradesh,
at the District level in 1951, 1961 and 1971.

Name of the District	Population as per 1951 Census		Population as per 1961 Census		Population as per 1971 Census	
	Effective population	Working population	Effective population	Working population	Effective population	Working population
1. Bahraich	57.6	46.2	56.2	44.4	59.2	35.1
2. Gonda	57.7	50.2	54.8	45.6	54.9	35.0
3. Faizabad	54.0	47.9	53.0	41.9	51.9	31.8
4. Sultanpur	55.6	47.9	52.9	41.5	51.6	31.8
5. Basti	56.0	51.2	53.9	49.1	53.3	35.2
6. Pratapgarh	53.9	48.5	51.3	45.9	49.7	30.4
7. Gorakhpur	55.0	49.6	52.9	44.2	52.2	32.4
8. Deoria	54.3	49.8	51.8	40.7	51.00	30.2
9. Azamgarh	51.9	44.0	49.8	39.0	48.6	28.7
10. Jaunpur	50.6	46.0	50.1	40.4	49.7	26.8
11. Ballia	51.2	37.8	49.6	36.2	51.8	27.9
12. Ghazipur	50.5	44.0	49.4	39.7	49.2	29.6
13. Varanasi	53.2	43.3	51.9	36.9	51.8	29.0
14. Mirzapur	55.2	48.3	53.3	46.4	50.8	35.0
15. Allahabad	51.4	45.4	50.4	47.2	48.9	31.7
E.U.P.	54.10	47.4	52.2	42.6	51.8	31.3

Source: Census of India, Uttar Pradesh, 1951, 1961 and 1971 and District Census Handbooks of Allahabad.

significance. It varied from 51.20 percent (maximum) for Basti to 37.80 percent (minimum) for Ballia in 1951, while in 1961 it varied from 49.10 percent (maximum) for Basti to 36.20 percent (minimum) for Ballia. In 1971 the maximum of 35.20 percent was again recorded by Basti but the minimum of 26.80 percent was recorded by Jaunpur. Therefore, the District of Basti was always noted for the maximum percentage of the working population during the post-independence period while Ballia District had the minimum percentage except in 1971, when this position was attained by the District of Jaunpur. Thus as regards the working population, the percentage variations among the districts at different censuses are, indeed, of considerable significance with regard to the occupational distribution of population.

Now it is better to examine the distribution of population according to the age groups as shown in Figs. 21.1, 21.2, 21.3 & 21.4. In this connection the study of Prof. Sandburg is of much significance. He studied the age groups of different countries and put his ideas in writing. Sandburg's age categories afford a rule of thumb measure of the trends of population particularly with regard to his youngest age group upto 14 years. According to him the proportion of this age group per 1,000 persons should be around 400, 330 and 200 in progressive, stationary and regressive population. The large proportion of children in the population is indicative of the large number of unproductive consumers. This also means that the burden of dependents on the working population is

excessive. Besides, it also points to the fast rising character of population.

Eastern Uttar Pradesh had an average of 410 children in the age group of 0 to 14 years per 1,000 persons in 1971. This tendency indicates in general a faster growth rate of population, which has resulted in larger number of children per 1,000 persons. Their larger number of adversely affect the effective or working population. The average life expectancy in India is lower as compared to many other countries of the world. It was 53 years in 1971¹⁷, but 70 years in the U.S.A., Japan, Australia, and 71 years in England in about the same year. A lower than 60 years of life expectancy in India reduces its effective or working population also and is a symbol of backwardness.

Therefore, a larger number of children and a low life expectancy affect adversely the economic health of Eastern Uttar Pradesh. It is evident that "the investment made in rearing up and educating people cannot bear full fruit because death occurs at an early age".¹⁸ The production and capital formation also suffer because the people cannot contribute to them for a longer duration. Thus, for Eastern Uttar Pradesh, a fast rising population and a low life expectancy are detrimental to economic development.

(ii) Sex:

Sex is an important element of personal environment because it plays a vital role in determining the working force of a region. The total population consists of males and

females, who engage themselves in different occupations to earn their livelihood. Although in the modern society there is no distinction on the basis of sex, for opportunities of employment still females cannot adjust suitably to all the occupations because of their certain limitations and restrictions. Therefore the sex composition of population is a potential factor in determining the working population of a region.

Higher percentage of the females than males in the population disturbs the structure of its economy, because most of females do not engage themselves in gainful economic activities and thus they depend solely on males for their livelihood. In such a case the working force falls short of the requirement for successful exploitation of natural resources and for smooth functioning of the regional economy. On the contrary, where the male population exceeds that of the females, the available working force is more than the employment opportunities provided by the region and consequently such a composition of population creates problem of underemployment and unemployment. Thus, a normal sex ratio is necessary for the proper development of the society. The rate of increase or decrease of population depends on the sex ratio to a great extent. A large excess of either sex does not prove beneficial to the country.

It is worthwhile to look into the sex composition of its population divided into different age groups and the rural urban pattern at the district level as provided in the table IV-7.

Table IV-7

During

The sex composition in Eastern Uttar Pradesh at the District Level, 1951-71 and their rural-urban pattern of 1971

Name of the District/Region/ State	Sex composition number of females per 1000 males			Sex composition number of females per 1000 males in 1971			Sex composition number of females per 1000 males in 1971			Sex ratio number of females per 1000 males in 1971 popu- lation	
	1951	1961	1971	0-14 yrs	15-59 yrs	60 yrs	0-14 yrs	15-59 yrs	60 yrs	Rural	Urban
1. Bahraich	907	897	941	998	745	926	998	745	926	841	853
2. Gonda	931	933	875	816	904	998	816	904	998	873	831
3. Faizabad	970	982	926	861	976	955	861	976	955	939	812
4. Sultanpur	998	1017	970	874	1046	1009	874	1046	1009	973	815
5. Pratapgarh	1039	1062	1016	888	1140	1014	888	1140	1014	1020	847
6. Basti	957	959	903	866	927	970	866	927	970	906	785
7. Gorakhpur	985	972	922	890	942	977	890	942	977	933	803
8. Deoria	1003	1002	958	909	995	1002	909	995	1002	963	818
9. Azamgarh	1016	1032	996	1042	1052	604	1042	1052	604	1004	876
10. Jaunpur	1024	1061	1011	993	1122	977	993	1122	977	1021	874
11. Ballia	1040	1035	975	937	1017	905	937	1017	905	981	858
12. Ghazipur	1000	1020	977	864	1105	834	864	1105	834	982	877
13. Varanasi	955	950	909	883	936	860	883	936	860	940	823
14. Mirzapur	979	940	903	896	917	845	896	917	845	923	772
15. Allahabad*	946	929	943	964	990	930	964	990	930	944	887
Eastern U.P.	983	983	938	903	974	902	903	974	902	947	826
Uttar Pradesh	910	909	879	868	896	819	868	896	819	889	821

Source: Census of India - Uttar Pradesh, 1951, 1961 and 1971.

* Allahabad means only the part of Allahabad included in the study region.

The number of females per 1,000 males i.e. the sex ratio has been falling in Eastern Uttar Pradesh since 1951 but this decrease is more evident at 1971 census as it decreased from 983 in 1951 to 938 in 1971, showing an appreciable fall in the ratio. In case of the whole of Uttar Pradesh, it decreased from 910 in 1951 to 879 in 1971 showing comparatively a smaller fall in the ratio. However, in both cases number of females is quite low. In western countries generally, the number of females is larger than males.

A perusal of the sex ratio in 1971 at the District level in Eastern Uttar Pradesh reveals that females are less than males in all the Districts except in those of Pratapgarh and Jaunpur where the females outnumber males. In 1951 and 1961, the females also outnumbered males in the Districts of Deoria, Azamgarh, Ballia and Ghazipur also. In Sultanpur District this tendency was found in 1961 only. Generally no satisfactory explanation can be given for the lower number of females per 1,000 males in most of the Districts of Eastern Uttar Pradesh. However, few points may be put forth in this respect. The girls in this region as well as in this country are not adequately looked after as the boys. As a result, the infant mortality among the girls is higher. The burden of bearing children at an early age is greater in many cases due to their births at short intervals, which leads to death of many women. It is also true that at the time of census, women are not counted so properly as the men because of their illiteracy and other social customs.

According to 1971 census, the sex ratio in the age groups shown by the table IV-7 reveals that it was 903, 974 and 902 in the age groups of 0-14, 15-59 and 60 years+respectively in case of Eastern Uttar Pradesh, whereas 868, 896 and 819 respectively for those age groups for the State of Uttar Pradesh as a whole. The number of females per 1,000 males is less in the age group^{of} 0-14 years but more in the age group of 15-59 years. It declines in the age group of 60 years. At no stage the females out number males in the case of Eastern Uttar Pradesh, but such situations are found if the sex ratio is analysed at the district level as shown in table IV-7.

In the case of rural and urban sections of population there was again a large difference in the sex ratio at the District level in Eastern Uttar Pradesh. As shown in the table IV-7 in 1971, the number of females per thousand males in rural areas was 947 and in urban areas it was 826 as compared to the similar figures^{of} 889 and 821 for the state of Uttar Pradesh as a whole. The sex ratio in the urban areas was quite low as compared to that in the rural areas. Both of them, however, varied widely at the District level as shown in the table IV-7. There may be many reasons for this variation but one important reason for it has been that the males go out of their villages to work in urban areas generally leaving their womenfolk and children behind in the villages and so the number of females in the urban areas declines as compared to their number in the rural areas. Even more wide variations of sex

ratio occur when the data at individual urban centres level are examined and analysed further.

(iii) Education and Training:

Among the personal environment, Educational structure and Training of people of a region also play a significant role in maintaining the efficiency of workers engaged in different occupations. There are three types of jobs needed for occupations: (i) unskilled jobs; (ii) skilled jobs; and (iii) technical jobs. The last two are gaining more importance in recent decades.

If a proper care is not taken to educate and train the workers, the active population may be less productive reducing the pace of economic development. The skill of the worker is, therefore, very important. There are three main factors which determine the skill formation of the workers viz. (i) Social attitude towards industrial or occupational jobs; (ii) Disparities of income between the skilled and the unskilled jobs; and (iii) The Depth of education and training given to them.

The influence of education and training on the people falling in the age groups of 0-14 years and 60 years does not count much, because they do not normally participate in the economic activities. But education has much influence on the active age group (15-59 years), which determines the occupational distribution of population. Education, however, is not the same as literacy. The test for literacy is just the ability to read and write. This is not enough for education as it must have some schooling. Even in the active age group (15-59 years)

the education of females does not matter much, because most of the educated women do not participate in the working force due to some limitations and restrictions. Hence, it is mainly the education of the males under the active age group which influences the structure and pattern of occupation.

Among the personal characteristics one's education and training limit the choice of his occupation. Most of the occupations need educated persons, who are also trained in particular trade. Because of the vast scientific development in the field of agriculture and its allied activities they also need a large number of educated persons for their successful working. Persons trained under extension schemes are better and well-informed farmers than others who are engaged in agriculture and its allied activities. The efficient utilisation of land and its proper cultivation aiming at higher yield per acre without much harm to the soil, also need trained persons. The mechanisation being introduced in agriculture, the expansion of the rural and cottage industries and the electrification of rural settlements etc., need a large number of skilled persons who are trained in various trades to serve in the villages.

The growth of literacy among males and females during the post-independence period has been undoubtedly remarkable. The variation in the literacy percentage of males and females in the rural and urban areas of Eastern U.P. is almost similar to that of Uttar Pradesh in particular and the country in general. The literacy percentage may have some impacts on

the gainful engagement of persons in different economic activities, which in turn determines the occupational distribution of population in a region. Eastern Uttar Pradesh being an economically backward region, is educationally far behind this state as a whole and the country. The following table shows the growth of literacy percentage for the period 1951-71 in Eastern Uttar Pradesh, the whole of U.P. and India.

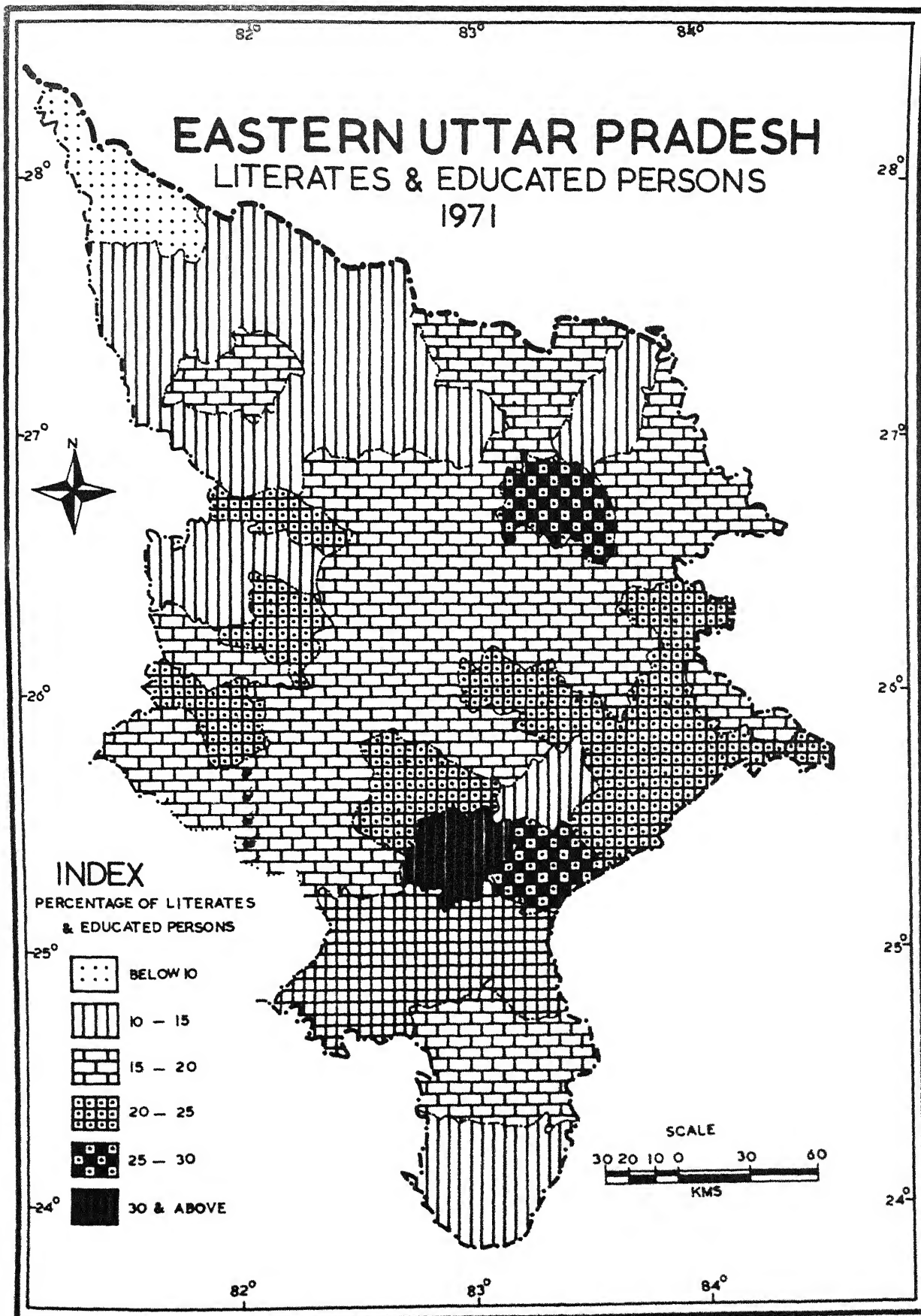
Table IV-8

Variation of Literacy percentage in Eastern U.P., U.P. and India, 1951-1971.

Name of the region, State, country	Literacy percentage variation during the period 1951-1971					Net per- centage of the variation in the total
	1951	1961	1971			
	Total	Total	Total	Males	Females	
1. Eastern U.P.	8.9	12.9	18.36	23.7	7.34	107%
2. Uttar Pradesh	9.1	17.6	21.70	31.5	10.60	138%
3. India	16.7	24.0	29.40	39.5	18.44	76%

Source: These figures are calculated from the Census Reports of 1951, 1961 and 1971 for U.P. and India and from the District Census Handbook of Allahabad for the same years.

The quality of population to a very large extent depends on the level of literacy, education and training. If the proportion of literate population is high, the task of economic and social development becomes easier. From these points of view the situation in Eastern Uttar Pradesh, is very unsatisfactory. According to 1971 Census, the total



literacy in this region was as low as 18.36 percent as compared to 21.70 percent for U.P. and 29.40 percent for India. It means that out of every 1,000 persons only 184 were literate and the remaining 816 were illiterate in this region. As against this, the state of Kerala had 60.40 percent and the countries like England, U.S.A. and Australia had over 95 percent literacy.

In general, the literacy among females both in rural as well as urban areas, is lower than that among males. For example, in Eastern U.P. in 1971, the literacy among males was 28.7 percent and among the females was 7.34 percent as against 31.5 percent and 10.6 percent of U.P. and 39.5 percent and 18.44 percent of India respectively in the same year. The literacy among males in the rural areas was 26.7 percent and in the urban areas was 53.6 percent in 1971 in this region. In the same year the literacy among females in rural areas was 5.7 percent and in the urban areas was 30.5 percent. For further details at the district level see table IV-9 which shows the literacy percentage among males and females in the rural and urban areas of the Eastern Uttar Pradesh as per Census of 1971 as compared to U.P. and India.

The table IV-9 reveals that the highest (27.3%) literacy percentage was recorded by the District of Varanasi and the lowest percentage (12.2%) was noted in the District of Bahraich. Among males it varied from the maximum of 40.0% for Varanasi District to the minimum of 18.8 percent for Bahraich District, whereas in case of females the maximum was 13.3 percent for Varanasi District and minimum (4.3%) percent for the District of Bahraich again.

Table IV-9

The percentage of literate and educated persons in rural and urban areas of the districts of Eastern Uttar Pradesh, 1971.

Name of the District/Region/ State/Country	Percentage of literate and educated persons among							
	Total population		Rural population		Urban population			
	All	Males	Females	All	Males	Females	All	Males
1. Bahraich	12.2	18.8	4.3	10.7	17.3	2.9	35.7	43.9
2. Gonda	14.0	22.2	4.7	12.5	20.4	3.4	40.2	50.5
3. Faizabad	19.3	29.7	8.1	19.9	27.3	6.0	41.0	50.8
4. Sultanpur	17.9	28.7	6.7	17.2	28.2	6.2	49.0	59.1
5. Pratapgarh	18.5	31.2	5.0	17.8	30.5	5.5	51.3	63.8
6. Basti	15.6	25.0	5.2	14.9	24.2	4.5	43.0	54.6
7. Gorakhpur	19.8	30.4	8.2	17.0	27.6	5.7	51.8	61.4
8. Deoria	18.0	29.4	8.0	17.2	28.6	5.3	44.0	54.6
9. Azamgarh	19.1	30.0	8.2	17.9	28.7	7.2	40.4	51.6
10. Jaunpur	21.2	34.5	8.1	20.0	33.4	6.9	39.5	50.4
11. Ballia	21.7	33.2	9.8	20.7	32.3	9.0	41.0	51.9
12. Ghazipur	20.1	30.7	9.3	19.1	29.5	8.4	42.9	55.3
13. Varanasi	27.3	40.0	13.3	21.6	34.8	7.6	44.1	54.5
14. Mirzapur	19.4	29.6	8.1	16.5	26.3	5.8	40.6	51.8
15. Allahabad	18.2	30.8	4.6	17.92	30.6	4.5	34.2	46.1
Eastern U.P.	16.4	28.7	7.4	16.8	26.7	5.7	43.2	53.6
Uttar Pradesh	21.7	31.5	10.6	18.1	28.6	7.0	43.6	52.1
India	29.4	39.5	18.4	24.0	34.4	12.9	-	61.8
								42.2

Source: India, Census Centenary, 1972, pp. 66-68.

There are large variations in the literacy percentage among males and females at the tahsil level. It differs from the maximum 31.5 percent for Varanasi tahsil to the minimum 89.70 percent for Nanpara tahsil. All the tahsils of Eastern Uttar Pradesh showing different literacy percentage have been classified and shown accordingly in Fig.19.

As regards the literacy percentage of the urban centres, it is noticeable that the new urban centres have more significance. For example, in 1971 it was the B.H.U. which recorded the highest percentage (79.3%) followed by Maruadih (66.3%), Mughalsarai Railway Colony (65.5%), Varanasi Railway Colony (60.8%) and Faizabad Cantt (60.7 percent).

The centres of new undertakings have more literacy percentage due to the concentration of professional population there. They have also the facilities for the education of children of their employees because schools and colleges are run by these establishments for them.

Training and education are important factors for the successful pursuit of an occupation. They are responsible for the skill and efficiency of the persons engaged in that occupation. But at the same time social attitude towards occupational, professional or industrial work also counts much. At present it ranks low on the priorities of a large number of job seekers, especially those with general education. The preference for a white collar job is still high among them, although a skilled worker may earn more than a clerk or a petty

government official. The present system of education is such that most of the students are not prepared to work in industrial establishments, rather they rush for white collar jobs. The shortage of training ^{retards the} pace of skill formation in this region. Unfortunately the economy of Eastern U.P. does not provide white collar jobs in large numbers with the result that the educated persons have to suffer from heavy unemployment and frustration.

Socio-economic conditions also play a significant role in general education and training for jobs. There are wide disparities in these respects among the social and religious groups. Since independence Hindus have progressed more than Muslims in matters of literacy and education. Among the different castes of Hindus, Kayasthas and Brahmins are more educated than others.

All the occupations, other than agriculture and its allied activities, require educated and trained persons for carrying on their operations. During the post-independence period, the latest improvement introduced in agriculture have revolutionised its operations also and so this predominant occupation of Eastern U.P. would now need the services of more persons having general education and technical training.

REFERENCES

1. Zelinsky, Wilbur, "A Prologue to Population Geography" Ed. 1966. Chapter-IV, "The effects of Physical Environment", p.28.
2. Whitebeck, R.H. "The Geographic Factor" Century Co. New York, Ed. 1932, p.87.

3. Semple, E.C. "Influence of Geographic Environment", Ed. 1911, p. 607.
4. Davis, D.H. "The Earth and Man" Ed. 1957. Part III Man and Environment", Chapter VI, The Environment: "Its Factors and Function", p. 54.
5. Webster's New World Dictionary, Ed. 1962, p. 228.
6. Report of the Indian Statutory Commission, Ed. 1930, cmd 35681, Vol. I, Chapter IV.
7. Manu, 1, 31, 87.
8. For the meaning of ethnic group and related concepts, see, R.M. Williams, Jr: The Reduction of Intergroup Tension; The social science research council bulletin 57, (New York, 1947). Also W.L. Warner and L. Strole: The social systems of American ethnic group.
9. Radha Krishnan, S.P. "Religion and Society", Ed. 1966, p. 104.
10. Davis, Kingsley "Population of India and Pakistan" p. 163.
11. "The Gazetteer of India", Vol. I (The Country and the People), Ed. 1973, "Social Structure - The Structure of Indian Society", p. 501.
12. Census of Uttar Pradesh, 1901, p. 266.
13. Ibid, p. 281.
14. Gist Noel, P. "Caste Differentials in South India", American Sociological Review, Vol. 19, April 19, 1973, p. 123.
15. Schwartzberg, J.E. "The Distribution of Selected Castes in North India Plain", Geographic Review; Vol. 55, Oct. 1955, p. 477. Also Mandelbaum, D.G. "Society in India: Vol. I Continuity and Change, Vol. III Change and continuity, Bombay, Popular Prakashan, 1972, Parts III and IV, pp. 159-316.
16. Davis, D.H. "The Earth and Man", Ed. 1957, "Man and Environment", The Effects of the cultural environment", p. 63.
17. India, 1974. "Planning Commission Estimates", p. 9.
18. Agrawala, A.N. "Indian Economy" Population: Basic facts, Life Expectancy, p. 113.

CHAPTER V

THE WORKING AND NON-WORKING POPULATION

CHAPTER VTHE WORKING AND NON-WORKING POPULATION5.1. General:

Eastern Uttar Pradesh is a region of fast growing population. As a matter of fact human beings are the real assets of a region or a country. The economic life, growth and prosperity of a region are to a very large extent dependent upon the size and the composition of its population. The population is the real source of region's supply of labour force to run the various economic organisations and enterprises which indeed are the basic and active factors of production. "It is the human resources that help keep other factors of production (land and capital) employed".¹ Again it is the human factor which is instrumental in the promotion of new techniques and new methods of productions. Thus the contribution of human factor to the volume of economic production or per capita income is of extraordinary significance indeed.

Labour is the most important factor of production and so a rise in population may be welcome as it would lead to an increase of labour supply. Since no production can take place without the labour, hence normally an increase in labour supply would result in more production. But under the conditions prevailing in this region in particular and in the country in general the rise in labour supply may not do what it did in the advanced countries of the world. A high birth rate of population in the beginning, tends to raise the proportion of children as

compared to adults and so it does not increase the proportion of labour force in the total population of the country. Hence in fact there is an increase in the number of unproductive consumers and dependents on the labour force which affects adversely the enterprise and the efficiency of the labour force. It reduces savings and quickens the wearing out of the existing meagre resources. Besides, women are forced to spend more time in looking after their children and thus they have less time available for productive activities. A fast growing population may lead to more labour supply than demand and may be responsible for over population and unemployment also. In this way, it may do more harm than any good. Under the present conditions of Eastern Uttar Pradesh, there is in fact no need for more labour supply. The problem facing it is that of abundance of labour, rather than that of shortage of labour. Unemployment is very large and it is rising at a fast rate also. Although under the planned development launched in India since 1951, there has been considerable increase in jobs for a large number of people, yet unemployment has also multiplied rapidly. This is so because a rise in labour force has been far more than the increase in job opportunities. Therefore, the immediate problem of Eastern U.P. is obviously to provide employment to the unemployed persons and to absorb as many of them as possible. It is also necessary to restrict the rise of labour supply as well as the growth of population in this region.

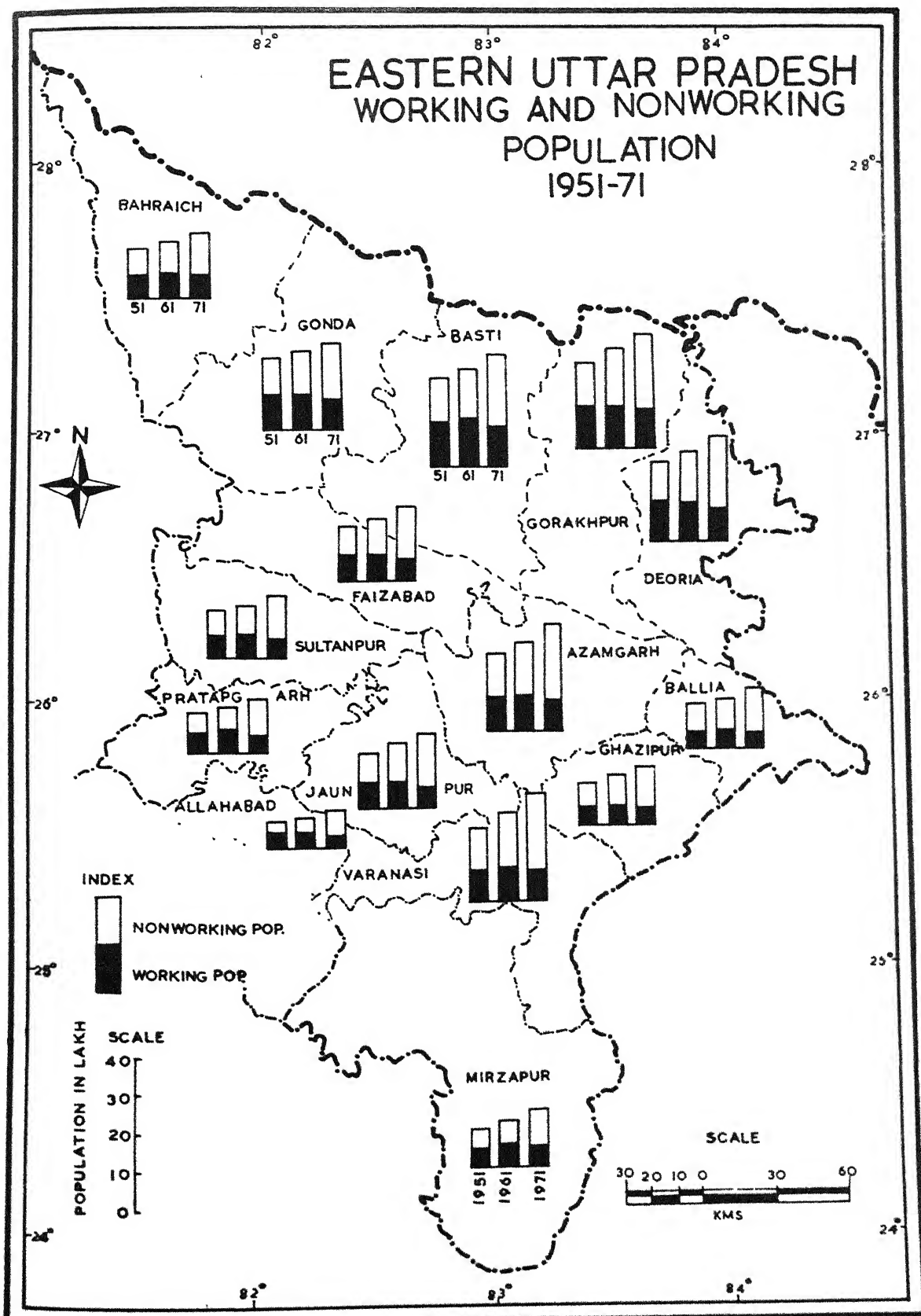
The distribution of labour force in different occupations i.e. economic activities indicates the occupational

structure of population and forms an important aspect of population of a region. Such a study throws light on the number of productive persons and those dependent upon them. Besides, it is very useful in getting an insight into the industrial structure and the level of economy of a country. The number of working persons depends on the factors of physical, social, cultural and personal environments which together constitute the determinants of occupational distribution of population, because usually on such factors depend the economic activities providing economically gainful employment to the persons who form the working population in a region. The strength of working population depends on the age composition, life expectancy, attitude of the people towards work and also on the availability of work etc. Since these factors have already been discussed in detail in the previous chapters, hence here it is worthwhile to evaluate their impacts on the occupational distribution of population in Eastern Uttar Pradesh.

5.2. The Working Population:

The Census data are the most important source in this respect. But a great care has to be taken in comparing the figures of one census with those of others, because of changing definition of a 'worker' from one census to the other. However, an attempt has been made to evaluate the strength of working population in this region, divided into the following sections:

- (i) The working population - Its size and distribution;
- (ii) The working population - Its sex analysis and age groups;
- (iii) The



FIGNO 20

working population - Its distribution among three sectors of economic activities i.e. (a) Primary sector; (b) Secondary sector; and (c) Tertiary sector; (iv) The working population - Its rural and urban distribution; (v) The non-working population; and (vi) The change in the occupational structure of the working population.

(i) The Working Population - Its size and Distribution:

The proportions of 'Effective Population' and 'Working Population' to the total population are in a way the symbolic of demographic, social and economic structure of the society of a region. The working population has to support the total population, which includes the non-working population also, consisting of mainly the persons, who fall in the age groups of below 15 and above 60 years in addition to those from 15 to 60 years of age (i.e. from the active age-group) who are not gainfully employed. In this way there are three broad categories of population: (A) The Effective Population; (B) The Working Population; and (C) The Non-working Population, based on the eligibility, availability and actual participation of the persons in the labour force. The working and non-working populations together constitute the total population.

It is evident from the table V-1 that the working population of Eastern U.P. was 11.14 millions in 1951, which increased to 11.36 millions in 1961, but it decreased to 9.80 millions in 1971. Thus during the period 1951-71 the working population actually decreased by 01.34 millions. However, it does not mean that the workers became out of employment. In

Table V-1

Break up of the working population in Eastern Uttar Pradesh, U.P. and India
1951-71

Name of the region/state/ country	Census year	Total population	Working population in absolute number			Working population in percent		
			T	M	F	T	M	F
1. Eastern Uttar Pradesh	1951	23,494,630	11,136,828	6,937,024	4,199,804	47.40	58.60	36.10
	1961	26,675,927	11,356,016	7,753,580	3,602,436	42.60	57.60	27.00
	1971	31,246,589	9,795,605	8,391,458	1,404,057	31.30	52.0	09.30
2. Uttar Pradesh	1951	63,215,742	26,396,614	19,279,496	7,117,118	41.80	58.30	23.60
	1961	73,754,554	28,850,141	22,480,360	6,369,781	39.10	58.20	18.14
	1971	88,341,144	27,334,455	24,562,058	2,772,397	30.9	52.0	06.70
3. India	1951	361,129,622	139,521,180	99,082,627	40,438,553	39.10	54.10	23.30
	1961	439,235,082	162,021,979	106,620,180	55,401,799	36.90	47.12	26.01
	1971	548,159,652	-	-	-	32.92	52.50	13.10

Source: Census of India, 1951, 1961 and 1971.
Census of U.P., 1951, 1961 and 1971.
District Census Handbooks 1951, 1961 and 1971.

fact, a stricter definition of the term "worker" brought about this result. The 1951-61 decade, showed only a nominal increase of 0.22 million in the working population of Eastern Uttar Pradesh. This small rise was mainly due to a change in the definition of 'worker'. In 1961, all those persons who depended on their earnings fully or partly were included in the working population.

But the Census of 1971 gives a strange picture as compared to that of 1961 as the strength of working population was reduced by 1.56 millions. During 1961-71 decade, the total population rose much faster and the decadal increase was 17.13 percent. As a result, the fall in the working force as proportion of the total population was very sharp. It was from 42.60 percent in 1961 to 31.30 percent in 1971. On the face of it, it appears as if there was a big reduction in the work, leading to a large increase in un-employment. But, really it was not so. The main reason for the fall of working force was the change in the basis of classifying the workers and the non-workers. In 1971, census, persons were classified as workers and non-workers on the basis of their main activity. Their part-time activities were not taken into account. Only those persons were treated as workers, who were fully engaged in economically gainful productive work. Others were treated as non-workers. Hence, such part-time workers as house-wives, the aged above 60 years, students etc. who helped in the economic activities were excluded from the working population, whereas in 1961 census, such persons were also included in the category of workers.

According to the strict and more meaningful definition of 'worker' adopted in 1971 census, the proportion of working population to the total population of Eastern U.P. was 31.30 percent as against 30.9 percent of the whole Uttar Pradesh and 32.92 percent of India in the same year. As compared to Japan* (49 percent), West Germany (47 percent), England (46 percent), Yugoslavia (45 percent), France (41 percent), U.S.A. (40 percent) and Canada (35 percent), this proportion was very low. Although the above percentage figures are not strictly comparable among themselves or with that of India because of the differences in the working age and the definition of "worker" etc. Yet they indicate broadly that the proportion in those countries is higher than that of Eastern Uttar Pradesh, the whole U.P. and India.

This comparison brings out two meaningful implications also. Firstly, the number of unproductive dependents on the working population (i.e. the Dependency ratio) is much larger in Eastern U.P. than in other advanced countries of the world. Secondly, the low proportion of the working population is associated with and is partly responsible for the low level of production in this region, in this state as well as in this country. More variation in this proportion is seen at the District level. The following table^{V-2} provides, the Districtwise distribution of working population of Eastern Uttar Pradesh.

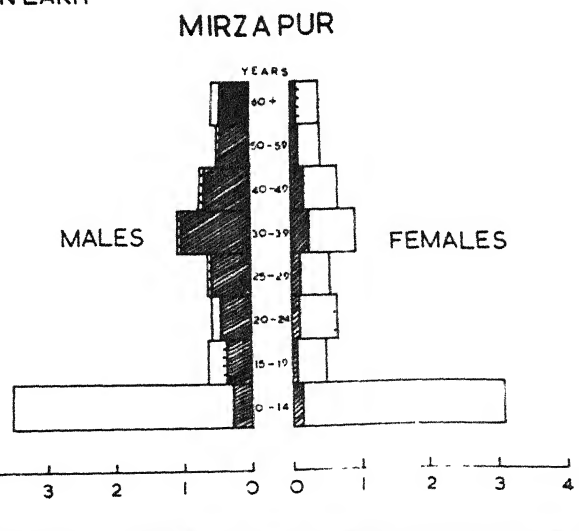
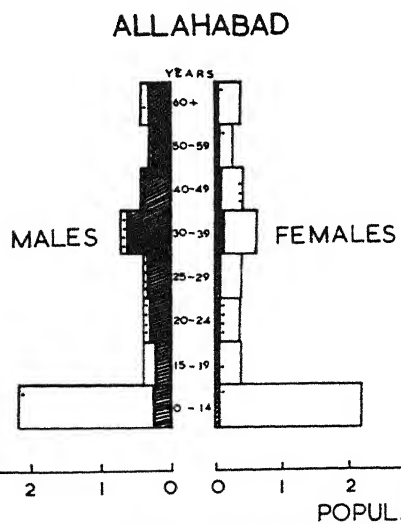
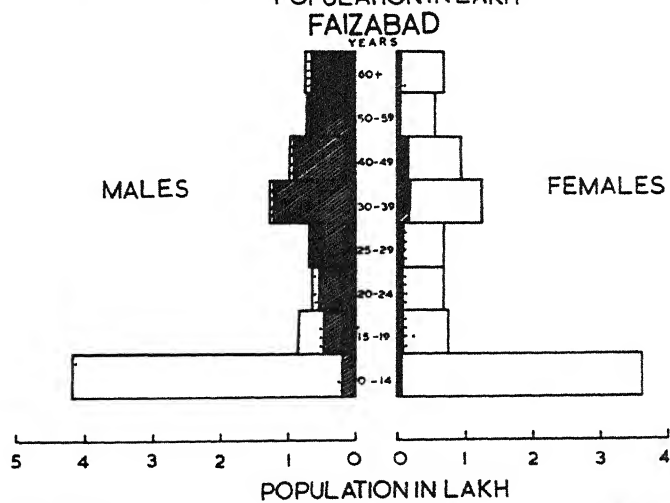
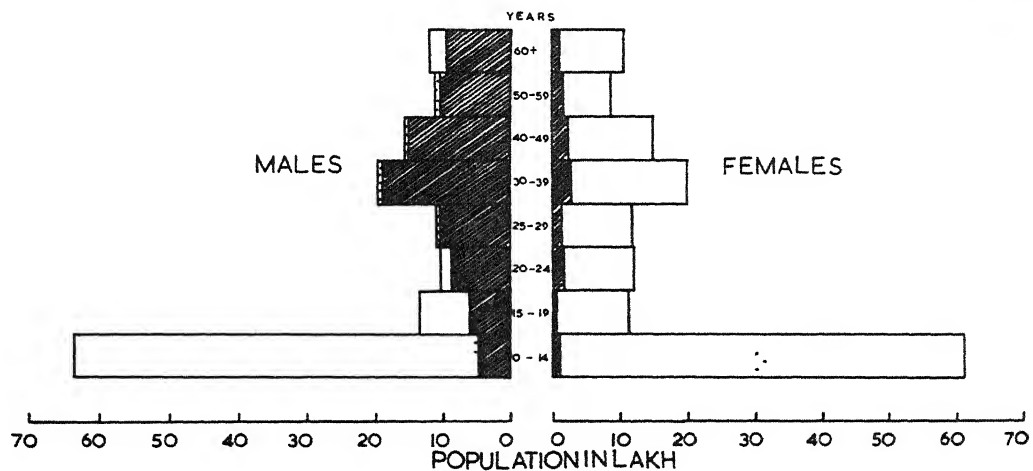
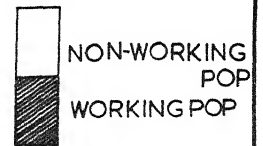
* The percentage figures for other countries of the world are for the year 1965.

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1971

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Table V-2

The size and ratio of working and non-working population in the Districts of Eastern Uttar Pradesh, 1971

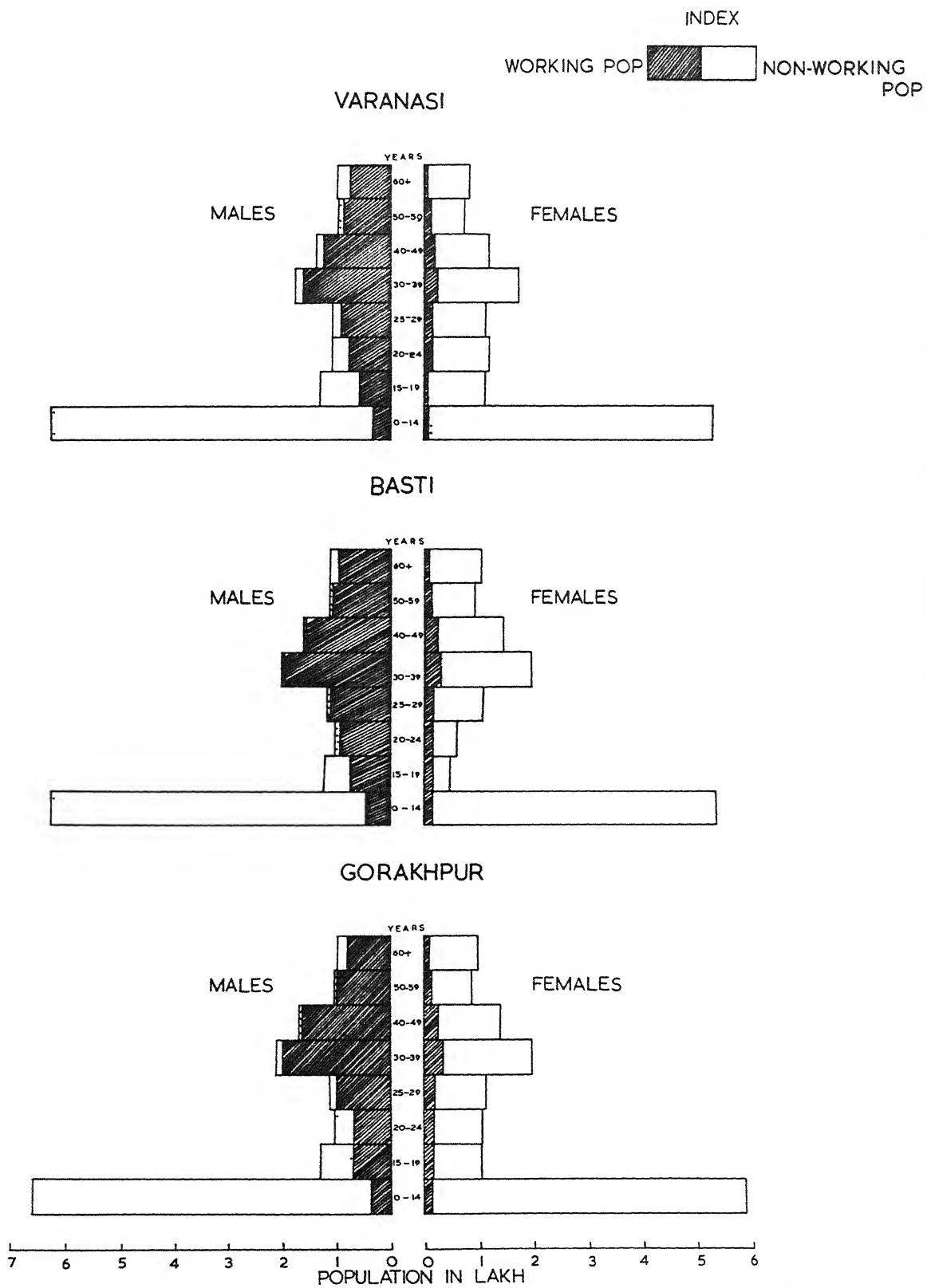
Name of the Districts	Total working population	Percentage of working population	Percentage of non-working population
Bahraich	606,022	35.1	64.9
Gonda	805,691	35.0	65.0
Faizabad	613,613	31.8	68.2
Sultanpur	413,758	31.3	68.7
Pratapgarh	432,090	30.4	69.6
Basti	1050,335	35.2	64.8
Gorakhpur	983,934	32.4	67.6
Deoria	848,661	30.2	69.8
Azamgarh	818,824	28.7	71.3
Jaunpur	538,442	26.8	73.2
Ballia	443,041	27.9	72.1
Ghazipur	453,292	29.6	70.4
Varanasi	827,486	29.0	71.0
Mirzapur	539,488	35.0	65.0
Allahabad	320,928	31.7	68.3
Eastern U.P.	9795,605	31.30	68.70
U.P.	-	30.90	69.10
India	-	32.92	67.08

Source: Census of India 1971.

The percentage of working population varied from a maximum of 35.2 percent in Basti District to a minimum of 26.8 percent in Jaunpur District while the District of Sultanpur recorded 31.3 percent, the average for Eastern Uttar Pradesh. The Districts having more than this average percentage were Bahraich, Gonda, Mirzapur, Gorakhpur, Faizabad and Allahabad. All other Districts recorded lower percentage than this average.

The percentage of working population at the tahsil level indicated more variations. It varied from the highest of 40 percent in Robertsganj to the lowest of 25 percent in Kerakat. Based on the participation rate, the sixty one tahsils of this

WORKING AND NON-WORKING POPULATION 1971



FIGNO. 212

region fall divided into four categories, the details of which have been shown in the Fig.22.

(ii) The Working Population - Its sex analysis and age groups:

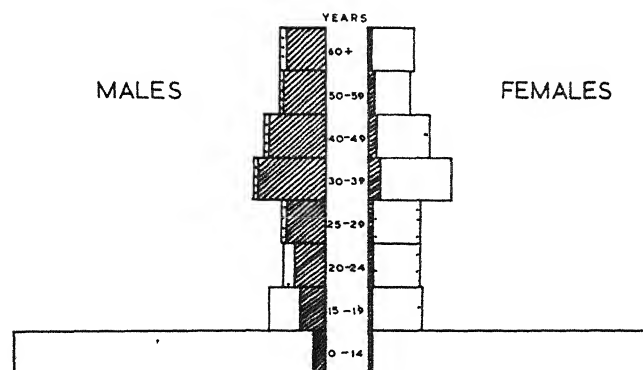
(a) Sex Analysis: A significant aspect of the working population is its division into male and female workers based on their age groups. In Eastern Uttar Pradesh the proportion of female workers is very small. This fact was significantly brought to light by the Census of 1971. The definition of 'worker' was however, very liberal in 1951 census. In 1951, the total working population of Eastern U.P. was 11.14 millions, out of which the male workers constituted 6.94 millions and the female workers 4.20 millions. This means that the female workers accounted for as much as 37.7 percent of the total working population. In 1961, the working population showed only a nominal increase over that in 1951. It was 11.36 millions in 1961, out of which male workers constituted 7.76 millions and female workers 3.60 millions. This means that a substantial increase was recorded in the proportion of male workers, while the proportion of female workers was significantly reduced to 31.7 percent. In 1971 the total working population dropped to 9.80 millions, out of which male workers constituted 8.40 millions and female workers 1.40 millions. The proportion of female workers further decreased to 14.30 percent in 1971 census. Hence, there was considerable increase in the proportion of male workers in 1971 (Table V-1).

If we take separately the male workers and female workers as proportions of the total males and total females in

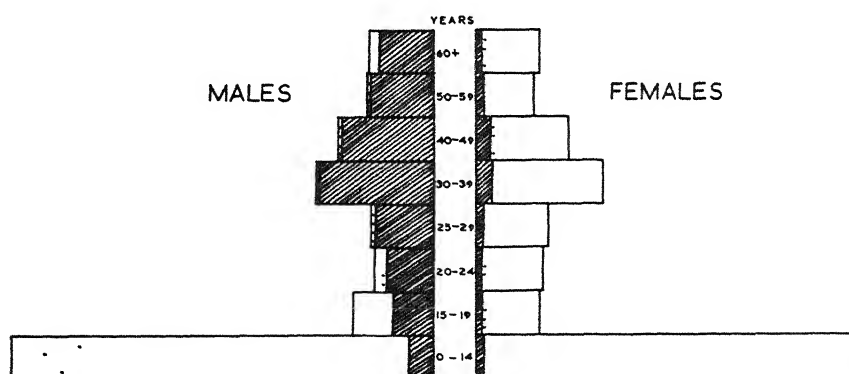
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WORKING POP  NON-WORKING POP 

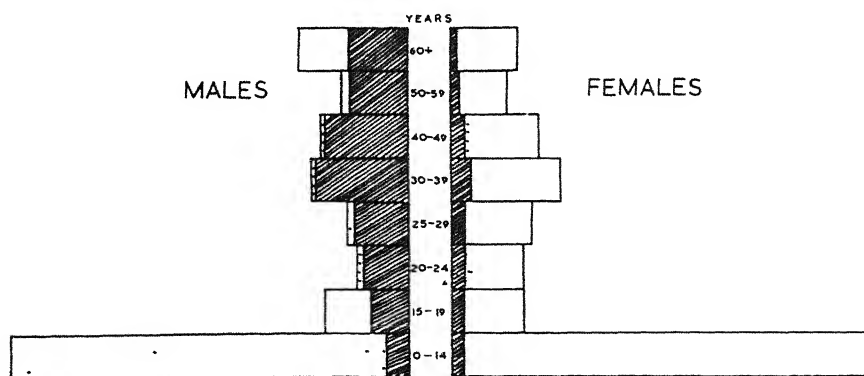
JAUNPUR



DEORIA



AZAMGARH



7 6 5 4 3 2 1 0 0 1 2 3 4 5 6 7
POPULATION IN LAKH

the whole population of Eastern U.P. (i.e. their work participation rate) we find that in 1951 the participation rate for males was 58.60 percent against 57.60 percent and 52 percent in 1961 and 1971 respectively. In case of female workers the participation rate in 1951 was 36.1 percent. In 1961 and 1971 it stood at 27.0 percent and 9.3 percent respectively. Thus there was a decline in the participation rate in both the categories of workers but it was much greater in the case of female workers. The participation rate of male and female workers showed more variation at the district level. Among the males this rate was highest (61.5 percent) in Bahraich and lowest (46.4 percent) in Jaunpur. Whereas in the case of females workers it was highest (15.2 percent) in Mirzapur and the lowest (3.7 percent) in Bahraich as per 1971 census. For further details of such variation, see table V-3.

The participation rate among males and females varied more significantly at the tahsil level. The maximum participation rate among males was recorded at 60.5 percent in Dommaria-ganj tahsil and the minimum at 44.2 percent in Mariahu tahsil, while in the case of female workers, the participation rate varied from the maximum of 21.6 percent in Robertsganj tahsil to the minimum of 3.1 percent in Kaiserganj tahsil. The variations are caused due to the environmental factors which differ from one tahsil to the other. The participation rate among males and females have been shown in the Fig. 23 and 24 respectively.

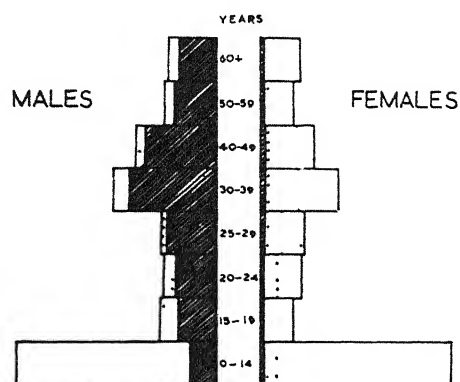
The Fig. 23 indicates that Mariahu tahsil is a category in itself showing the lowest participation rate (44.2 percent)

WORKING AND NON-WORKING POPULATION 1971

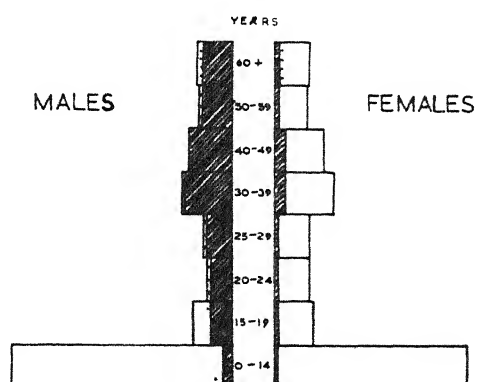
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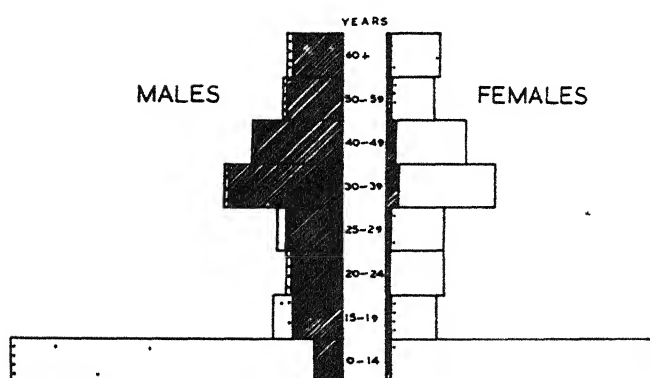
BAHRAICH



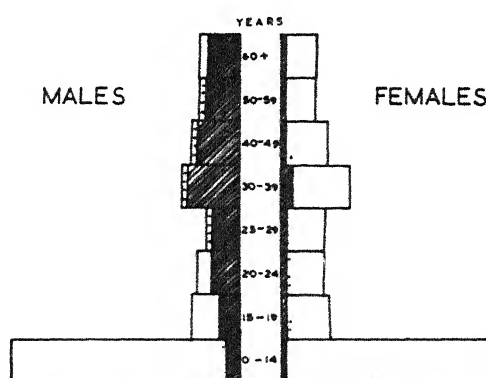
PRATAPGARH



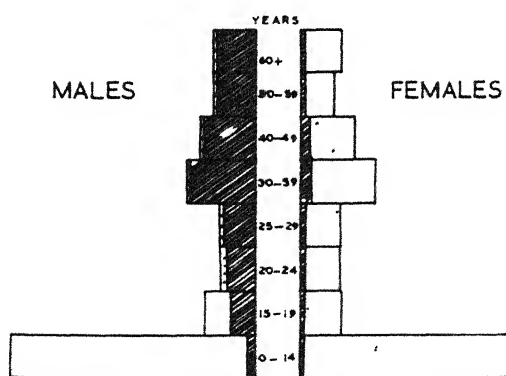
GONDA



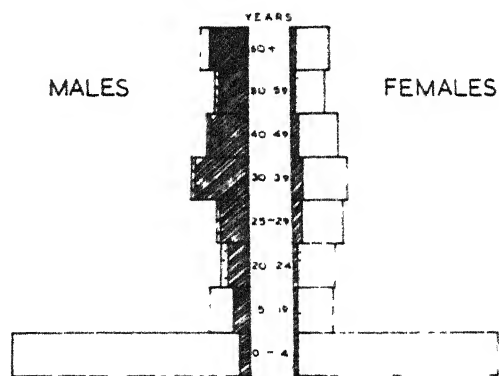
BALLIA



SULTANPUR



GHAZIPUR



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POPULATION IN LAKH

4 3 2 1 0 0 1 2 3 4
POPULATION IN LAKH

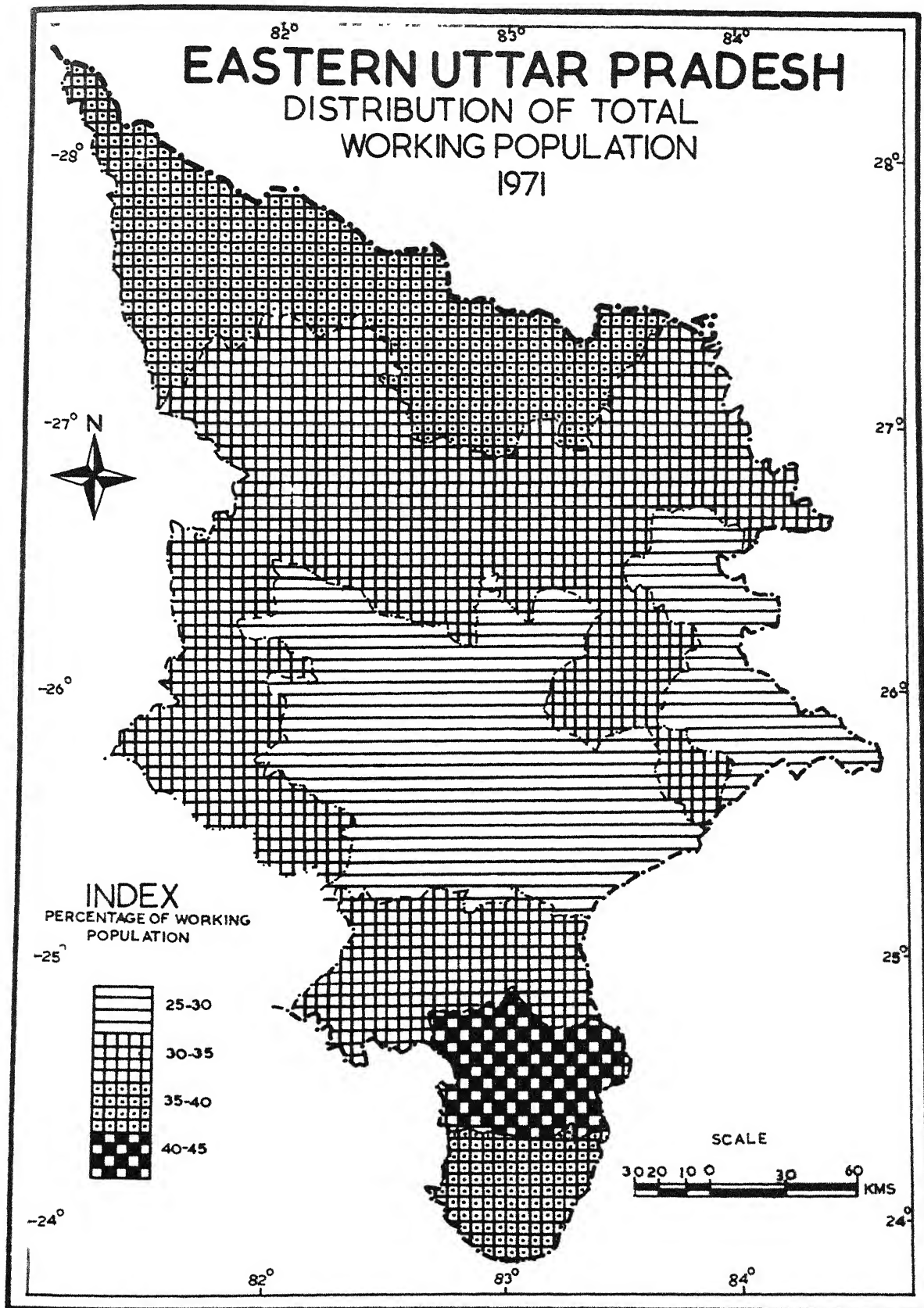
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Table V-3

Participation rate among males and females separately in the
Districts of Eastern Uttar Pradesh, 1971

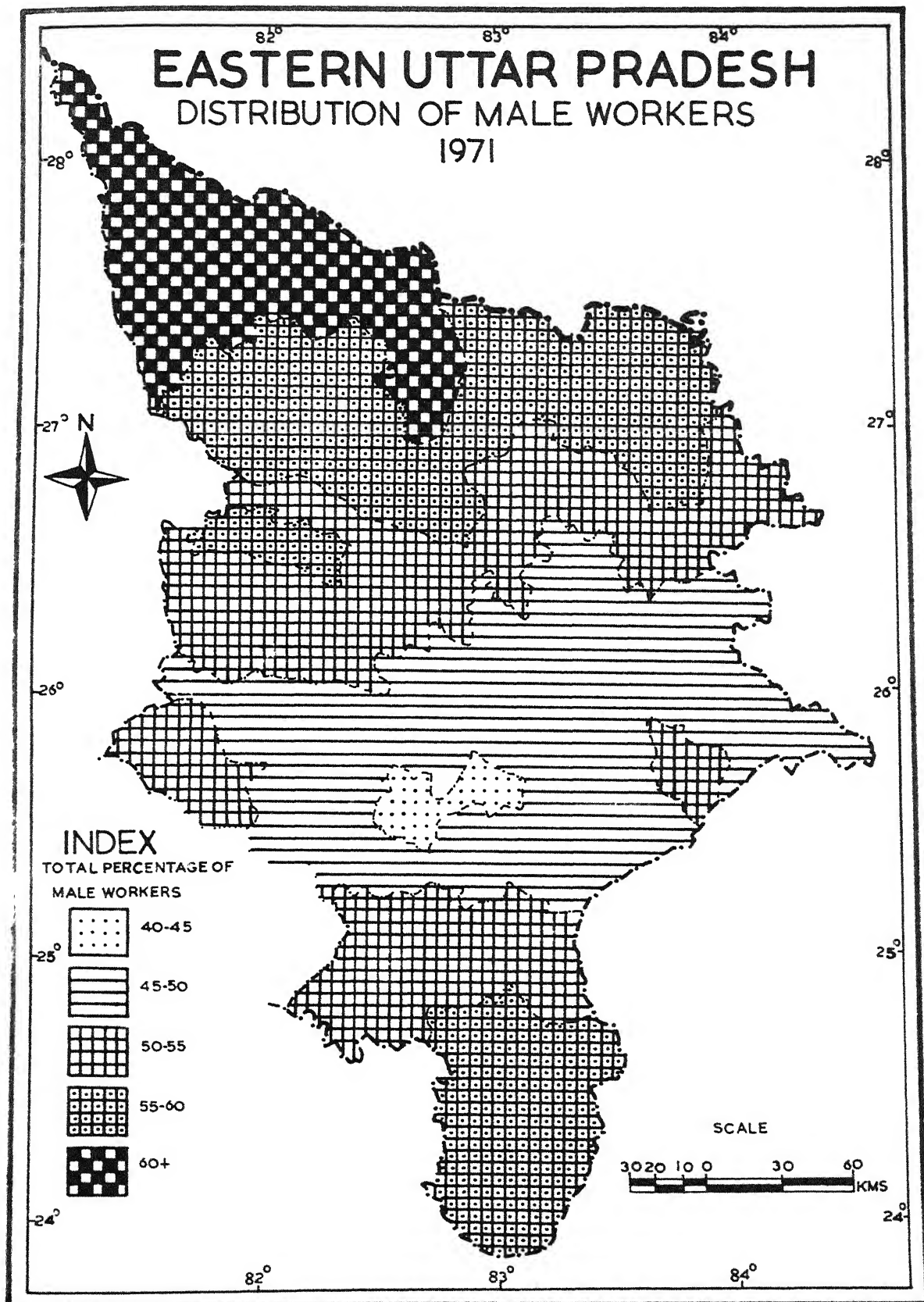
Name of the District	Percentage of workers		
	Total	Males	Females
1. Bahraich	35.1	61.5	3.7
2. Gonda	35.0	59.4	7.1
3. Faizabad	31.8	52.9	9.1
4. Sultanpur	31.3	52.3	9.6
5. Pratapgarh	30.4	49.1	11.9
6. Basti	35.2	57.6	10.4
7. Gorakhpur	32.4	52.6	10.5
8. Deoria	30.2	57.8	7.7
9. Azamgarh	28.7	47.7	9.6
10. Jaunpur	26.8	46.4	7.5
11. Ballia	27.9	46.5	8.8
12. Ghazipur	29.6	47.9	10.8
13. Varanasi	29.0	48.2	7.9
14. Mirzapur	35.0	52.9	15.2
15. Allahabad	31.7	49.4	12.8
Eastern U.P.	31.3	52.0	9.3

Source: Census of India 1971, series 21, Uttar Pradesh.



among the males. The maximum number of tahsils (25) fall under the range having the participation rates from 45.1 percent to 50.0 percent. Seventeen tahsils have the participation rates ~~from~~ 50.1 percent to 55.0 percent and thirteen tahsils from 55.1 percent to 60.0 percent. Only five tahsils (all lying in the Trans-Ghaghra region) record more than 60.1 percent participation rate among the males. The tahsils having from 55.1 percent to 60.0 percent participation rates are located either in the Trans-Ghaghra tract or in the southern upland^{sub} region. Out of thirteen tahsils in this range ten are located in the Trans-Ghaghra tract and one in the Doab sub-region, while the remaining two i.e. Robertsganj and Dudhi are situated in the southern uplands. This analysis, therefore, reveals that the participation rate among males is more pronounced in the Trans-Ghaghra tract and in the southern uplands, while the Doab sub-region usually records the lower participation rate. The variations in the participation rates are mostly due to the changes in the environmental conditions, which affect the socio-economic and demographic patterns of various tahsils of this region differently.

The low participation rate among females needs further elaboration. It is quite evident from the Fig.24 that Amethi and Robertsganj have higher participation rates of females in this region. Thirty one tahsils show the female participation rates ranging from 5.1 percent to 10.0 percent and twenty three tahsils from 10.1 percent to 15.0 percent, while very low participation rates (below 5.0 percent) were recorded in five tahsils lying in the Trans-Ghaghra subregion. The highest rate



FIGNO. 23

in Robertsganj tahsil was recorded in the southern uplands, while the lowest in Kaiserganj tahsil in the Trans-Ghaghra sub-region. Most of the tahsils of the Doab show the middle range average participation rate among the females.

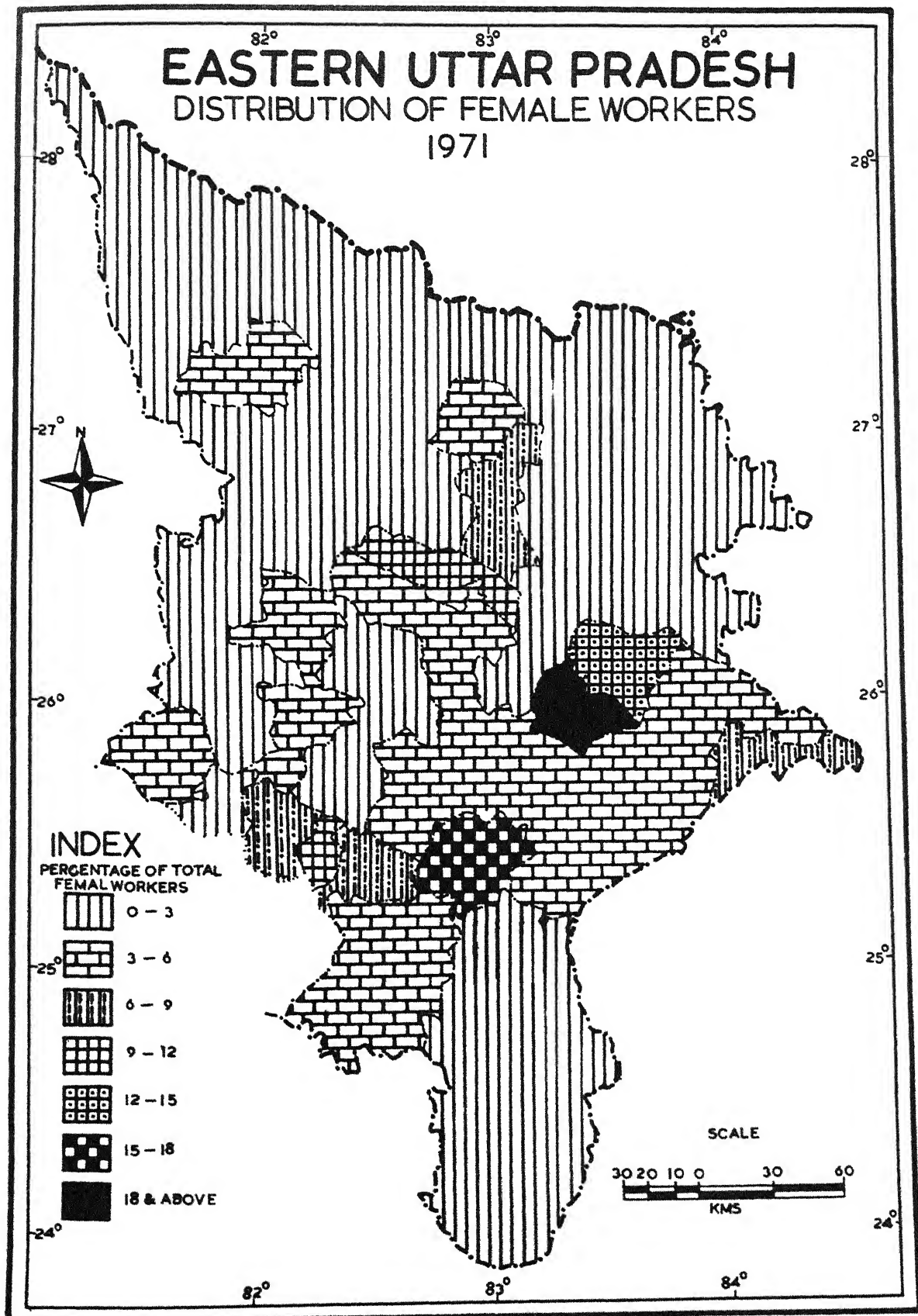
Of the total working population of Eastern Uttar Pradesh in 1971, males constituted 85.7 percent and females 14.3 percent as against 89.9 percent and 10.1 percent of whole U.P. respectively. The proportion of male workers in this region is lower than the average for Uttar Pradesh as a whole while in the case of female workers it is higher than the average for this state.

Table V-4

The distribution of working population and its division into males and females in Eastern Uttar Pradesh, at District level, 1971

Name of the district/ region or state	Percentage of males and females to the total working population,	
	Male	Female
1. Bahraich	95.2	4.8
2. Gonda	90.6	9.4
3. Faizabad	86.3	13.7
4. Sultanpur	84.9	15.1
5. Pratapgarh	80.2	19.8
6. Basti	85.9	14.1
7. Gorakhpur	84.5	15.5
8. Deoria	87.6	12.4
9. Azamgarh	83.3	16.7
10. Jaunpur	86.0	14.0
11. Ballia	84.4	15.6
12. Ghazipur	81.9	18.1
13. Varanasi	87.0	13.0
14. Mirzapur	79.4	20.6
15. Allahabad	80.3	19.7
Eastern U.P.	85.7	14.3
Uttar Pradesh	89.9	10.1

Source: Percentage figures are based on Census of India 1971, Series 21, Uttar Pradesh.



FIGNO. 24

A perusal of the table V-4 reveals that both the categories of workers are not uniformly distributed in this region. The participation rate of 85.7 percent among the males is about six times higher than of the females participation rate of 14.3 percent in this region. The proportion of males to the total working population at the district level varied from the maximum 95.2 percent (in Bahraich) to the minimum 79.4 percent (in Mirzapur), while on the contrary in the case of females it varied from the maximum 20.6 percent (in Mirzapur) to the minimum 4.8 percent (in Bahraich). The preponderance of males in the labour force indicates the large extent of non-working female population in all parts of this region as well as in the whole of Uttar Pradesh and India.

(b) Age groups of working population:

The effective population group (15-59 yrs) is the major contributor to the working population, yet the contributions made by the children of the age groups below 15 years and the persons of the age groups above 60 years need not be underestimated. In view of the above facts it is necessary to study and analyse the details of working population in respect of its age groups in order to know the extent of contributions made by each age group to the total working population of Eastern Uttar Pradesh. The table V-5 provides such details for all the Districts of Eastern Uttar Pradesh as well as for the whole of Uttar Pradesh.

Table V-5

The distribution of working population by age groups in the Districts of Eastern Uttar Pradesh, 1971

T = Total, M = Males, F = Females.

Name of the Districts/region/ State	Contribution made by persons under different age groups in percent of working population										Total percentage of working population under the 0-14 and above 60 years
	Age groups										
	0-14 years		15-59 years		60 and above						
	T	M	F	T	M	F	T	M	F		
1. Bahraich	6.7	6.3	0.4	83.8	80.1	3.7	9.5	8.8	0.7	16.2	
2. Gonda	5.8	5.2	0.6	84.4	76.5	7.9	9.8	8.9	0.9	15.6	
3. Faizabad	4.5	3.5	1.0	84.1	72.7	11.4	11.4	10.1	0.9	15.6	
4. Sultanpur	3.5	2.8	0.7	84.3	71.4	12.9	12.2	10.7	1.5	15.7	
5. Pratapgarh	4.6	3.2	1.4	82.8	66.4	16.4	12.8	10.8	2.0	17.2	
6. Basti	5.8	4.4	1.4	83.9	72.3	11.6	10.3	9.2	1.1	16.1	
7. Gorakhpur	5.5	3.9	1.6	84.8	72.0	12.8	9.7	8.6	1.1	15.2	
8. Deoria	5.9	4.5	1.4	83.4	73.5	9.9	10.7	9.6	1.1	16.6	
9. Azamgarh	6.0	4.2	1.8	81.7	67.8	13.9	12.3	11.3	1.0	18.3	
10. Jaunpur	4.3	3.2	1.1	84.0	72.3	11.7	11.7	10.5	1.2	16.0	
11. Ballia	5.7	4.3	1.4	82.3	69.3	13.0	12.0	10.8	1.2	17.7	
12. Ghazipur	4.8	3.4	1.4	81.2	66.0	15.2	14.0	12.5	1.5	18.8	
13. Varanasi	5.1	4.1	1.0	84.4	73.4	11.0	10.5	9.5	1.0	15.6	
14. Mirzapur	7.4	4.9	2.5	83.2	66.4	16.8	9.4	8.1	1.3	16.8	
15. Allahabad	5.5	3.8	1.7	84.1	67.5	16.6	10.4	9.0	1.4	15.9	
E.U.P.	5.5	4.2	1.3	83.9	71.7	12.2	10.6	9.8	0.8	16.1	
U.P.	4.9	4.0	0.9	84.5	71.9	12.6	10.6	9.8	0.8	15.5	

Source: (1) Census of India 1971, series 21, Uttar Pradesh, Part IIB (1) General Economic tables, pp. 2-135, 3d. 1973.

(2) District Census Handbooks.

It is evident from the table V-5 that the age groups from 15 to 60 years i.e. 'effective population groups' constituted 83.9 percent of the total working population of Eastern Uttar Pradesh and the age groups below 15 years accounted for 5.5 percent, while those at and above 60 years made up 10.6 percent of the working population respectively. Thus the age groups other than those of the effective population contributed as much as 16.1 percent to the total working population of this region and this proportion compares favourably with 15.5 percent for the whole U.P. The proportion of the above category of age groups showed minor variations from one District to the other in this region. The age groups of children (below 15 years) made contribution of the maximum of 7.4 percent in Mirzapur District and the minimum contribution of 3.5 percent in Sultanpur District, while the contribution of the age groups at and above 60 years varied from the maximum of 12.5 percent in Ghazipur District to the minimum of 8.1 percent in Mirzapur District. The males contributed substantially and females marginally to the working population in respect of all the age groups in the different districts of Eastern U.P. The working population and its sex composition classified by age groups has been further elaborated at the district level and regional level as well in the Figs. 21.1, 21.2, 21.3 and 21.4.

(iii) The Working Population - Its distribution among the three sectors of Economic Activities:

The distribution of working population i.e. the working force in different occupations or economic activities presents

an analysis of occupational structure of a region. No uniform pattern has been adopted to classify the working population into different industrial groups or categories, rather the criteria changed from one census to the other. Therefore, the data so collected, may not be strictly comparable because of the differences in the definition of 'worker and his dependents' and the methods and facilities of collecting information. In view of these difficulties, it would not be possible to draw very correct inferences or to reach definite conclusions in this regard. Therefore, one has to focus\$ his attention on broad trends only.

All occupations or industries in which the working population is engaged are broadly grouped into three sectors: (i) The Primary or agricultural sector; (ii) The Secondary or Industrial sector; and (iii) The Tertiary or service sector. In the primary sector are included the cultivation and other occupations connected with agriculture, like animal husbandry, forestry, fishing etc. Therefore, this sector is primarily based on land or natural resources. In the industrial sector are included large and small manufacturing units, construction works etc. These units manufacture various products utilising the raw materials produced in the primary sector. The service sector includes trade, transport communications, banking and government and non-government services. According to the 1971 census the workers have been classified into nine broad categories which are grouped into three sectors as given below:

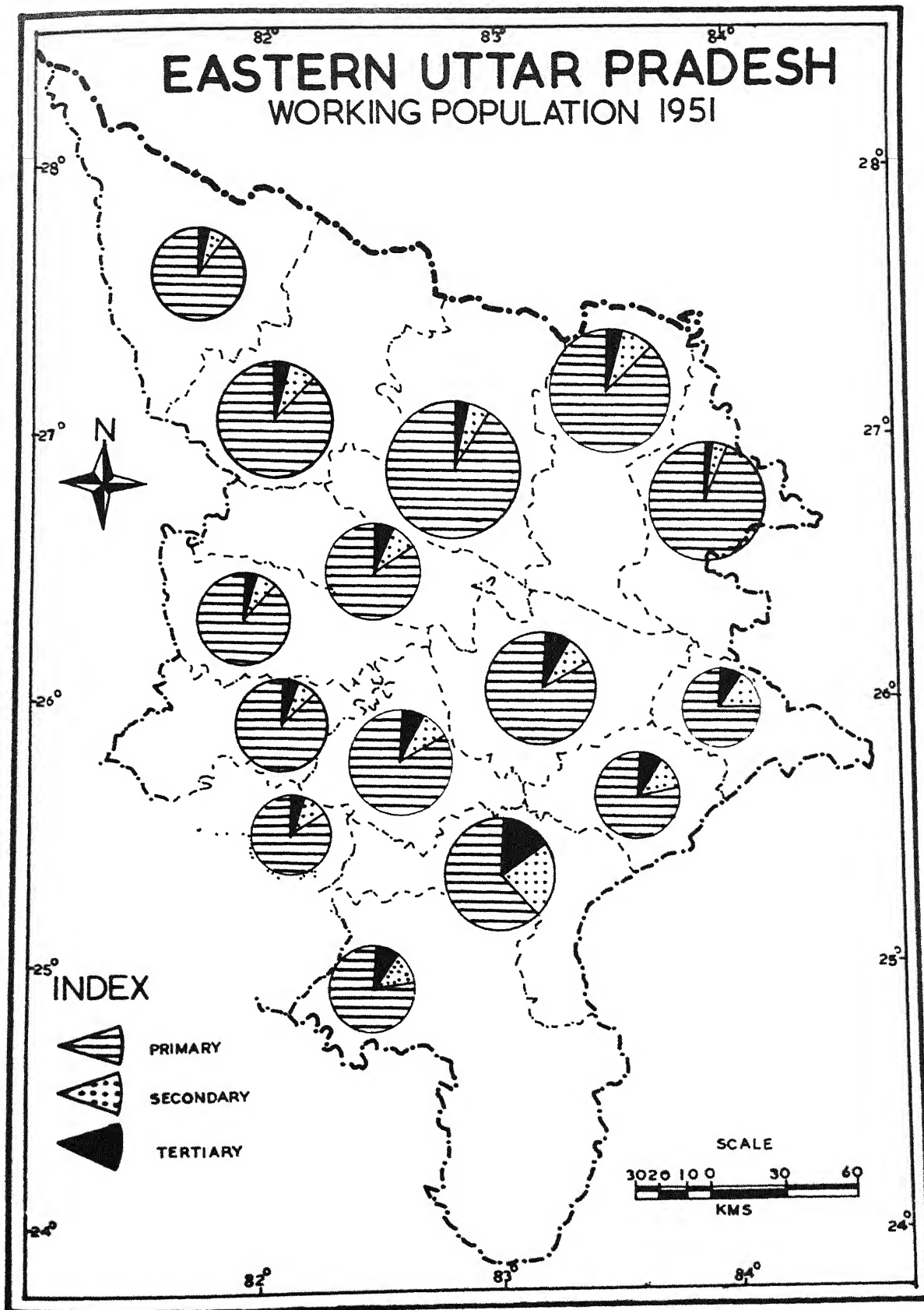
(1) The Primary sector: It includes (i) Cultivators; (ii) Agricultural Labourers; (iii) Persons engaged in Livestock raising, Forestry, Fishing, Hunting and Plantation work, Gardening, Orchardng and many allied activities; and (iv) Mining and Quarrying. This sector includes I, II, III and IV categories of working population according to 1951 as well as 1961 census.

(2) The Secondary sector: It includes (v) Manufacturing, processing, servicing and repair works having (a) Household Industry and (b) Other than household industry; and (vi) Construction works. This sector includes IV, V and VI categories of working population according to 1961 census and its V category according to 1951 census.

(3) Tertiary sector: It includes (vii) Trade and Commerce; (viii) Transport, storage and communications; and (ix) Other services. This sector includes VI, VII and VIII categories of working population as per 1951 census and its VII, VIII and IX categories as per 1961 census.

The table V-6 gives the percentages of working population engaged in the three sectors which indicate the sectorwise occupational distribution of population in Eastern Uttar Pradesh as compared to the whole of Uttar Pradesh as well as India according to the three previous censuses.

The table V-6 shows that the occupational structure of this region as that of this state as well as India is that of an underdeveloped country. According to the estimates of Simon



FIGNO.25

Table V-6

Sectorwise Distribution of Working Population (percentages) in Eastern U.P., Uttar Pradesh and India as per Census of 1951, 1961 and 1971

Name of the unit	Census years	Percentages of working population		
		Primary sector	Secondary sector	Tertiary sector
Eastern U.P.	1951	84.8	5.2	10.0
	1961	83.4	7.9	8.7
	1971	84.1	6.5	9.4
U.P.	1951	76.7	7.7	15.6
	1961	75.8	9.7	14.5
	1971	78.0	7.9	14.1
India	1951	72.1	10.7	17.7
	1961	71.8	12.2	16.0
	1971	72.1	11.2	16.7

Source: Figures are based on (i) Census of India 1951, Part IIB: Economic Tables Ed. 1952, pp. 34-73, (ii) Census of India 1961, Paper No.1 of 1962, pp. 53-55, (iii) Census of India 1971, Series 21, Uttar Pradesh, Part IIA, General Population Table, pp. 316-323.

Kuznets in underdeveloped countries nearly 56.4 percent of the labour force depends on agriculture, 26 percent on services and 17.6 percent on industry. Although the occupational structure differs even in these countries, yet in all the underdeveloped countries a large proportion of labour force is engaged in agriculture followed by the service sector and then by the industrial sector.

Because of the low incomes in the undeveloped regions or countries, a large part of the income is used in purchasing the food and other agricultural products, leaving its little proportion to be spent on non-agricultural goods and services.

As a result there is very less demand for goods and services of the industrial and service sectors. Further, in these counties modern capital goods and the recent techniques needed by industries and services are very inadequate. For these reasons the industrial and service sectors are unable to expand and so they cannot provide large job opportunities to the labour force. Hence the increasing population gets more shelter in the agricultural sector due to want of jobs in non-agricultural sectors.

An important point worth mentioning is that, with the economic development, the occupational structure of a region or a country undergoes significant changes, because a large number of new jobs or service opportunities are created in the non-agricultural sector. In the sphere of agriculture, the economic development largely takes the form of increase in per head productivity, which will push out many workers from their jobs. As a result the labour force shifts from agriculture to manufacturing industries and services. In this connection it may be in the fitness of the things to quote A.G.B. Fischer who writes that "----- in every progressive economy there has been a shift of employment ---- from the essential primary activities ---- to secondary activities of all kinds and to a still greater extent into tertiary production....".

As stated earlier a substantial proportion of the work force of Eastern U.P. is engaged in agriculture and a very small proportion is engaged in industry and services. Hence agriculture is the major economic activity of a very large

proportion of the working population of this region. As much as 84.1 percent of this regions labour force as against 78.0 percent of U.P. and 72.1 percent of India is engaged in this sector i.e. agricultural or primary sector. The secondary and tertiary sectors provide work to a very small proportion of the labour force of this region. In secondary sector only 6.5 percent of the labour force of Eastern U.P. as against 7.9 percent of whole U.P. and 11.2 percent of India is engaged while in its tertiary sector 9.4 percent of its labour force as against 14.1 percent of U.P. and 16.7 percent of India is employed. This simply means that industries and services together donot provide jobs to even about 16 percent of this regions labour force. This indicates that Eastern Uttar Pradesh is more backward than the State of Uttar Pradesh and is still more backward as compared to this country on the whole.

However, it would be significant to have a look at this region's occupational distribution of working population during the post independence period. With economic development the proportion of work force engaged in agriculture declined in this region during this period whereas the proportion in its secondary and tertiary secotrs rose, although the occupational structure has remained almost static and there has been no basic change in it except some minor variations. In 1951 the proportion of work force in different sectors were as under: Primary sector 84.8 percent, secondary sector 5.2 percent and tertiary sector 10.0 percent. In 1971 the distribution of workers among different sectors stood as below: primary sector 84.1 percent,

secondary sector 6.5 percent, and tertiary sector 9.4 percent. This means that from the view point of providing gainful activity to the labour force, agriculture still continues to be ~~the~~ major economic activity of this region while its secondary and tertiary sectors continue to be the minor activities even after three decades of the post-independence era and they will continue to be so for many more decades to come.

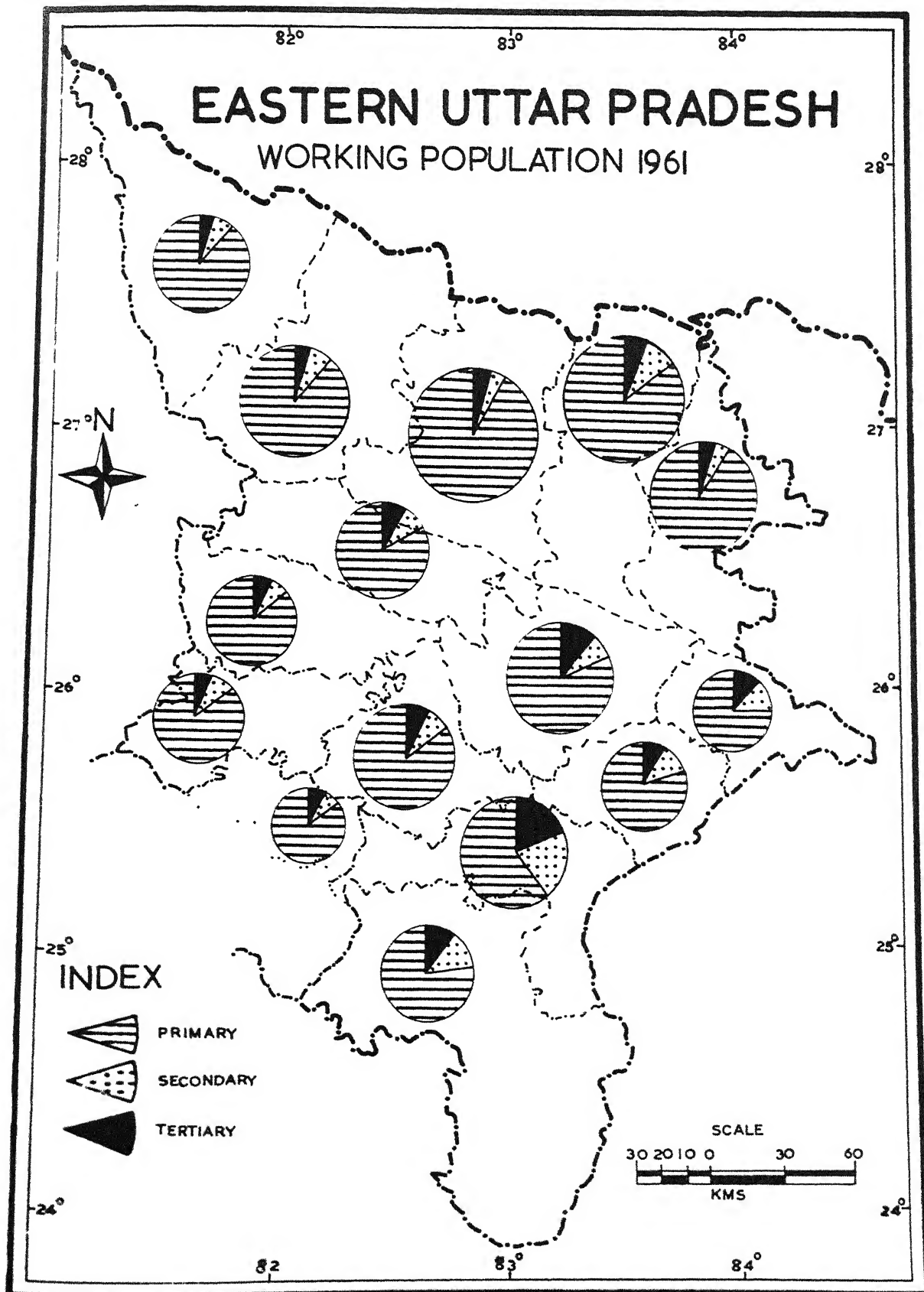
Undoubtedly under the frame work of the Five Year Plans tremendous efforts have been made to develop the activities of secondary and tertiary sectors along with agriculture and its allied activities i.e. the primary sector activities. But the results gained have not been so substantial as to make any significant mark mainly due to the high growth rate of population and the rising prices during the period. However, some small changes were seen in the occupational structure of this region, particularly at the District level as is revealed by the table V-7. These minor variations from the general trend of this region in case of each of the three sectors may be analysed as given below:

(1) The Primary Sector: In this region the proportion of the working force engaged in the primary sector in 1951 was 84.8 percent which declined to 83.4 percent in 1961 but rose to 84.1 percent in 1971. This trend indicates a deterioration in economic conditions, retarding industrialisation and urbanisation of the region. Thus agriculture is in a dominant position in the occupational structure of this region, although there

are considerable variations in this respect from one District to the other.

The minimum percentage of the working force engaged in the primary sector is noted in the District of Varanasi, where it was 62.8 percent in 1951, 60.0 percent in 1961 and 59.2 percent in 1971. Similar downward trend is witnessed in the District of Gorakhpur also. Varanasi and Gorakhpur are infact the two Districts of this region which are noted for their economic development during the period. In them the economic activities of secondary and tertiary sectors were much developed and diversified. In 1971 among other Districts the percentage of working force under primary sector varied from the maximum of 90.9 percent in Basti to the minimum of 80.4 percent in Mirzapur. Thus the workers engaged in the primary sector held the dominant position in this region and accounted for more than 80 percent of its working population in all the Districts of this region except Varanasi where secondary and tertiary sector activities had much developed.

(ii) The Secondary sector: During the period the proportion of the working force of this region in this sector remained within the range of 5.2 percent in 1951 to 7.9 percent in 1961 which declined to 6.5 percent in 1971. This reflects a declining trend of indigenous industries. There was indeed some progress in the field of industries during the period 1951-61 when the work under five year plans was in progress which resulted in the increase in the proportion of workers engaged



in this sector as recorded in 1961. In 1971 the low percentage (6.5 percent) proves that the industrialisation made no significant dent in the occupational distribution of the population of this region during the period 1961-71. For all the Districts except Varanasi and Allahabad the percentages recorded for this sector in 1961 were more than their percentage for 1971 as shown in the table V-7. The proportion of the working force in this sector in 1971 varied from the maximum of 19.2 percent in Varanasi to the minimum of 2.3 percent in Bahraich while among other Districts it ranged from 9.0 percent in Azamgarh to 3.3 percent in Gonda. Besides Varanasi and Azamgarh in the Districts of Mirzapur, Faizabad, Allahabad and Gorakhpur secondary sectors more developed and diversified.

(iii) The Tertiary Sector: In this sector also one finds the tendencies similar to primary sector because the proportion of working force engaged in this sector showed a decline and then a rise. This proportion in 1951 was 10.0 percent which declined to 8.7 percent in 1961 but rose to 9.4 percent in 1971. The distribution of the working population engaged in this sector shows even greater variation among the districts as it varied in 1971 from the maximum of 21.6 percent in Varanasi District (followed by Mirzapur with 11.6 percent, Ballia and Ghazipur both with 10.8 percent, Gorakhpur with 10.0 percent, Jaunpur with 9.9 percent, Faizabad with 9.5 percent, Azamgarh with 8.2 percent) to the minimum of 5.3 percent in Basti District.

The above description analysing the occupational distribution of working population into the three sectors at

Table V-7

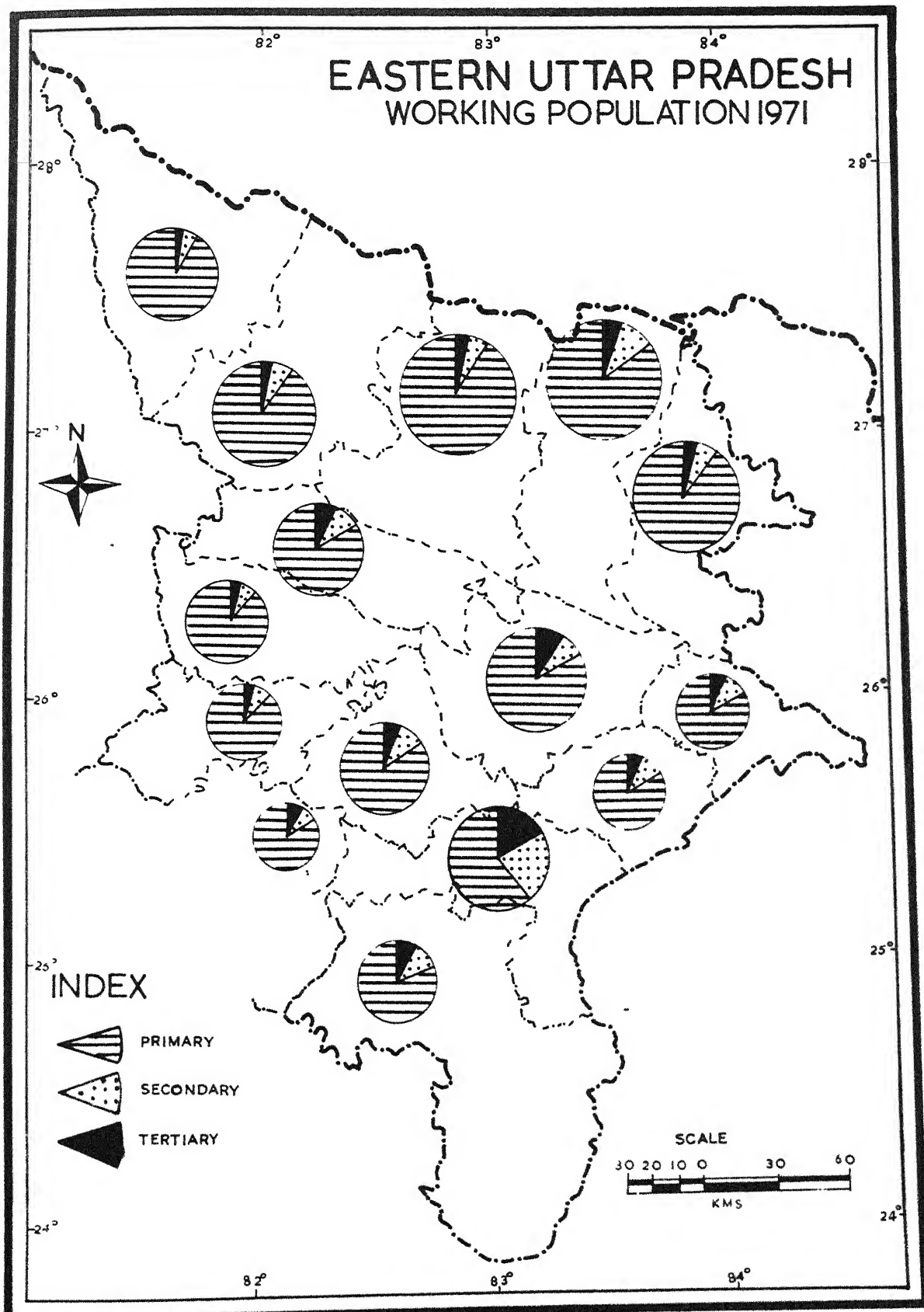
Distribution of working population by sectors in percent during the period 1951-71.

Name of the District/region	Primary sector		Secondary sector		Tertiary sector	
	1951	1961	1951	1961	1951	1971
1. Bahraich	90.5	88.9	2.7	4.2	6.8	6.9
2. Gonda	88.1	88.5	2.8	4.3	9.1	7.2
3. Faizabad	85.3	82.7	5.1	8.6	9.6	8.7
4. Sultanpur	88.7	86.0	3.5	6.7	7.8	7.3
5. Pratapgarh	87.5	87.2	4.4	6.0	8.1	6.8
6. Basti	91.3	91.6	2.6	4.3	6.1	4.1
7. Gorakhpur	87.7	85.0	3.4	6.4	8.9	8.6
8. Deoria	94.7	83.8	1.8	4.4	4.1	4.8
9. Azamgarh	84.2	81.3	7.1	11.4	8.7	7.3
10. Jaunpur	83.8	84.7	6.1	8.6	10.1	7.7
11. Ballia	74.8	74.9	9.1	11.8	16.1	13.3
12. Chazipur	78.1	79.8	8.0	8.9	13.9	11.3
13. Varanasi	62.8	60.0	14.2	19.0	23.0	21.0
14. Mirzapur	78.1	76.7	7.9	10.6	14.0	12.7
15. Allahabad	83.3	84.7	5.2	8.1	11.5	7.2
E.U.P.	84.8	83.4	5.2	7.9	10.0	8.7
						9.4

Source: Censuses of India - Series Uttar Pradesh, 1951, 1961, 1971.

the District level in Eastern Uttar Pradesh indicates an erratic and indefinite trend. For example, in this region the proportion of working population in primary and tertiary sectors showed an upward trend in 1961 over 1951 but again a downward trend in 1971. On the contrary to it the proportion in secondary sector showed a downward trend 1961 over 1951 but again an upward trend in 1971. Such trends are seen in case of almost all the Districts of Eastern U.P. with only a few exceptions.

In order of importance of the proportion of working population in Eastern Uttar Pradesh at the District level it is found that the largest proportion of this working population is engaged in the activities of primary sector followed by those of the tertiary and secondary sectors respectively with a single exception shown by the District of Azamgarh where in 1971 the proportion of working population engaged in the activities of secondary sector was 9.0 percent, slightly higher than 8.2 percent of the tertiary sector. A similar exception but of lesser magnitude is noted in the case of Allahabad District also but this does not show the trend of the three tahsils of this District separately which form part of this region. However, the pace of changes is very slow in this region. In the secondary and tertiary sectors it is not big enough to produce any significant impact on the primary sector. The agricultural progress is also inadequate to make available some of the required resources for developing the economic activities under the secondary and tertiary sectors.



FIGNO. 27

Although there has been no basic change in the overall picture of the occupational pattern of this region during the last three decades, yet some significant developments in some parts of the different sectors and in some Districts of this region are certainly visible. For example, the number of workers in the modern industries has considerably increased. This is indicative of the fact that this region is producing new products by using new or modern techniques in the recent decades. Also there are expansions of job opportunities in education, health, science, railways, communications, electricity etc. Such changes indicate that the process of modernisation of the economy is on the way. But these changes although important qualitatively, are not so large as to produce a noticeable change in the overall occupational pattern of the distribution of working population in Eastern Uttar Pradesh. To appreciate the details of such changes in the working population it is necessary to go into further details. The compositions of the working population in the rural areas are somewhat different from those found in urban areas of this region, because of material differences in the functions performed by the rural and urban areas.

(iv) The Working Population - Its rural and urban distribution:

An important aspect of the working force is its division into male and female workers by rural and urban areas. Out of 9.8 millions working population of this region in 1971, only 0.62 million i.e. 6.4 percent came from the urban centres. This indicates that the proportion of workers in the urban population

was quite less as compared to its proportion in the rural population. The difference between the proportions of male and female workers is more pronounced in urban areas than in the rural areas. For example, according to the 1971 Census in Eastern Uttar Pradesh, 31.6 percent of the rural population constituted the working population in the rural areas as compared to 28.2 percent of the urban population as working population in the urban areas. In the villages as compared to the urban areas the participation rates of both male and female workers are high. For male workers it was 52.4 percent in villages and 47.6 percent in urban areas and in the case of female workers it was 9.5 percent in former areas and 6.8 percent in latter.

When there are inadequate jobs and greater illiteracy among women in the region, the female participation in the labour force is bound to be low. Since this region is largely agricultural, the participation rates both for male and female workers are, therefore, comparatively higher in the villages.

If we analyse the participation rates of male and female workers in the rural and urban areas of this region at the District and tahsil levels, the deviation of minor as well as major nature from the regional pattern are noticed. At the District level such deviations showing higher participation rates of urban than rural working force are noted in the Districts of Azamgarh and Jaunpur and at Tahsil level, ⁱⁿ the tahsils of Tanda, Ghosi, Mohemmadabad (Azamgarh), Shahganj, Mariahu, Kerakat, Bansdih, Saidpur, Robertsganj and Dudhi. In case of Azamgarh District the participation rate of 32.7%

in the urban areas is higher than 28.4 percent of the rural areas. But for males 47.1 percent of the urban areas is lower than 47.7 percent of the rural areas and for females 16.3 percent of the urban areas is much higher than 9.2 percent of the rural areas. In the District of Jaunpur, among males, the participation rate is 46.9 percent in urban areas, which is marginally higher than 46.4 percent in the rural areas, otherwise this district also falls in line with the general trend of the region.

Table V-8

The participation rates of male and female workers for the Districts and Tahsils showing the deviations from the general trend of the region of Eastern Uttar Pradesh, 1971.

Name of the Districts/ Tahsils/Region/State	Rural/ Urban	Participation rates in percent		
		Total	Male	Female
1	2	3	4	5
A. Districts				
1. Azamgarh	Rural	28.4	47.7	9.2
	Urban	<u>32.7</u>	47.1	<u>16.3</u>
2. Jaunpur	Rural	26.9	46.4	7.7
	Urban	26.7	<u>46.9</u>	3.6
B. Tahsils				
1. Ghosi	Rural	30.7	48.3	12.9
	Urban	<u>34.1</u>	<u>48.9</u>	<u>18.7</u>
2. Mohemmadabad	Rural	29.4	48.1	10.4
	Urban	<u>35.8</u>	<u>48.6</u>	<u>21.4</u>
3. Tanda	Rural	30.8	52.9	8.1
	Urban	<u>31.6</u>	51.7	<u>8.6</u>
4. Bansdih	Rural	28.9	48.0	9.6
	Urban	<u>30.3</u>	<u>47.8</u>	<u>12.2</u>
5. Shahganj	Rural	27.7	49.2	6.1
	Urban	<u>29.6</u>	<u>52.2</u>	3.3

Contd.

1	2	3	4	5
6. Mariahu	Rural	26.0	44.1	8.9
	Urban	<u>27.6</u>	<u>47.3</u>	4.8
7. Kerakat	Rural	25.0	44.5	6.7
	Urban	24.5	<u>46.0</u>	1.2
8. Dudhi	Rural	36.2	56.4	14.7
	Urban	<u>42.7</u>	<u>64.0</u>	4.0
9. Robertsganj	Rural	40.0	55.9	22.8
	Urban	39.0	<u>57.4</u>	3.9
10. Saidpur	Rural	28.7	47.5	10.0
	Urban	26.7	<u>47.8</u>	3.2
Eastern U.P.	Rural	31.6	52.4	9.5
	Urban	28.2	47.6	6.8
Uttar Pradesh	Rural	31.5	53.0	7.3
	Urban	27.7	47.9	3.1

Note: Underlined figures indicate deviations.

However, the Districts and Tahsils shown in the table V-8 reveal contradictions because the participation in them in the urban areas is higher as compared to the rate in the rural areas, as regards one or more of the aspects. The tahsils of Ghosi and Mohemmadabad of Azamgarh District are noted for allround deviations because the participation rates for all as well as for the male and female workers in their urban areas are higher than in their rural areas. The proportion of the total working population in the urban areas as compared to the rural areas is higher in all the tahsils shown in the table except those of Kerakat ^{Robertsganj} and Saidpur. The higher participation rate of female workers in the urban areas than in the rural areas is noted only in Tanda and Bansdih Tahsils while in the case of males the higher urban participation rate is recorded in the

Tahsils of Shahganj, Mariahu, Dudhi, Kerakat and Robertsganj.

An urban area, in contradistinction to a rural area, has a larger majority of inhabitants engaged in industrial and non-agricultural activities. In addition to its varied occupational characteristics, an urban area provides such facilities as transportation, banking, commercial and technical services, better community facilities and other civic services. Some persons from the rural areas who join the labour force and reside in there urban areas leaving the unproductive consumers of their families in the rural areas, inflate their participation rates. Thus the non-agricultural activities of the urban areas account for a higher participation rate among males. The tahsils showing higher participation rate usually accommodate usually small towns with developed commerce-cum-industrial activities and many such towns are tahsil head-quarters as well.

It is now worthwhile to study and analyse in detail the participation characteristics in respect of different towns and urban centres also. Eastern U.P. accommodates towns of varying sizes i.e. from Varanasi with 606,721 persons to Markundi with 1,312 persons only. The table V-9 gives the distribution of the participation rate for the total male and female workers for all the urban centres of this region.

The participation rates of urban centres indicate variations of greater magnitude, differing from the maximum of 52.8 percent for Renukoot to the minimum of 22.7 percent for Barahalganj. If we analyse the proportion of males and females separately in the working force, it shows variations of still

Table V-9

Participation Rates of persons, males and females in the urban centres of Eastern Uttar Pradesh, 1971
(Figures in percent)

Name of the urban centre	T	M	F	Name of the urban centre	T	M	F
1. Nanpara	27.1	48.6	2.8	35. Mariahu	27.6	47.3	4.8
2. Bahraich	28.3	50.0	2.7	36. Kerakat	24.6	46.0	1.2
3. Bhinga	31.9	55.5	3.0	37. Rasra	23.3	40.8	4.3
4. Balrampur	27.6	47.5	4.1	38. Reoti	30.3	47.8	12.2
5. Tulsipur	33.0	57.1	2.0	39. Ballia	25.8	44.1	3.3
6. Utraula	26.5	47.5	4.1	40. Saidpur	26.7	47.8	3.2
7. Gonda	27.7	46.9	3.9	41. Ghazipur	24.5	42.9	3.2
8. Colonelganj	27.9	50.1	2.2	42. Mohemmdabad	26.6	46.9	4.0
9. Nawababganj	30.7	52.6	4.8	43. Bhadohi	26.5	45.2	5.1
10. Faizabad	28.2	46.8	3.9	44. Gopiganj	28.3	47.9	6.0
11. Gosaiganj	31.0	53.5	3.9	45. Gyanpur	25.0	40.9	4.3
12. Jabalpur	25.2	46.0	1.9	46. Varanasi	27.6	47.2	3.9
13. Akbarpur	28.4	49.8	4.1	47. Ram Nagar	23.9	49.9	3.9
14. Tanda	31.6	51.7	8.6	48. Maruadih	29.7	51.1	1.7
15. Sultanpur	28.1	48.1	3.6	49. Lohta	34.3	52.7	13.2
16. Pratapgarh	28.5	48.4	5.0	50. Mughalsarai	28.0	47.7	1.9
17. Bansi	29.6	51.2	4.6	51. Chandauli	25.9	45.1	3.9
18. Basti	28.8	47.7	4.6	52. Chakia	27.2	47.1	4.1
19. Khalilibad	31.8	52.1	4.4	53. Mirzapur	28.4	48.8	4.5
20. Gorakhpur	26.4	44.9	3.2	54. Kachhwa	27.1	45.8	6.9
21. Barahalganj	22.7	44.6	2.2	55. Ahraura	30.1	52.0	6.3
22. Padrauna	30.0	52.0	3.0	56. Chunar	29.1	48.6	6.8
23. Siwarki	26.5	46.1	2.1	57. Obra	50.6	73.3	2.7
24. Deoria	26.5	44.4	3.5	58. Ghurkchurna	32.1	46.8	3.1
25. GauraBarhaj	24.5	44.0	3.5	59. Robertsganj	28.4	48.2	4.1
26. Kopaganj	34.1	48.9	18.7	60. Chopan	37.8	59.6	1.4
27. Azamgarh	25.3	43.3	3.3	61. Morrkundi	35.1	52.8	15.5
28. Mau Nath				62. Renukoot	52.8	73.9	2.4
Bhanjani	38.1	49.0	25.6	63. Pipri	37.6	59.3	2.9
29. Mubarakpur	32.7	49.7	13.7	64. Dudhi	27.4	43.6	7.2
30. Mohemmdabad	26.2	42.3	8.8	65. Mau Aima	26.6	46.7	5.3
31. Shahganj	29.6	52.2	3.3	66. Phulpur	26.7	44.6	9.4
32. Mogra							
Badshahrr	26.2	46.9	3.3	E.U.P.	27.7	47.9	3.1
33. Machhli							
Shahar	25.6	47.3	3.3				
34. Jaunpur	26.5	46.2	3.7				

greater magnitude in both the categories of workers. In case of males the participation rate varies from the maximum of 73.9 percent for Renukoot to the minimum of 40.8 percent for Rasra. Among the towns and urban centres where more than 50 percent of the males constitute the working population are Bahraich, Bhinga, Tulsipur, Colonelganj, Nawabganj, Gosaiganj, Tanda, Bansi, Khalilabad, Padrauna, Shahganj, Maruadih, Lohta, Ahraura, Obra, Chopan, Markundi and Pipri, while in all other urban centres of this region less than 50 percent of males constitute the working population. The female participation is, however, quite low but it also shows considerable variation as it differs from the maximum of 25.6 percent for Mau Nath Bhanjan in District Azamgarh to the minimum of 1.2 percent for Kerakat. Among the towns where more than 10% of females form the working population are Kopaganj, Markundi, Mubarakpur, Lohta and Reoti. In the remaining towns of this region the participation rate of females is less than 10 percent. The above discussion indicates that it is mainly the small size new towns which have higher participation rate among males and females. The towns which are famous as centres of cottage and small scale industries show higher participation rates of females, for example Mubarakpur, Maunath-Bhanjan and Kopaganj which are known for their small scale cotton textile industries. After a thorough discussion and analysis of the working population of this region, it becomes imperative to study and analyse the size, distribution and characteristics of the non-working population.

(v) The non-working population:

The proportion of total population not accounted for any productive work is put under the category of non-working population. This part of population is usually found larger than the working population even in the advanced countries of the world. This category of population mainly consists of children, invalid persons of the effecting age group and most of those in age group of above 60 years. In Eastern Uttar Pradesh the non-working population accounted for 68.7 percent of the total population in the 1971 census, which compares well with 60.1 percent of whole U.P. and 67.02 percent of India. But it is quite high as compared to 51.0 percent in Japan, 53.0 percent in West Germany; 54.0 percent in England and 55.0 percent in Yugoslavia. In this region a good number of eligible persons also donot get employment and hence they do not contribute to the production. It is a matter of great concern that in this region the human resources remain untapped to the benefit the economic growth of the region.

In 1971, in this region 68.7 percent of the total population was recorded as non-workers and this proportion varied from the maximum of 73.2 percent in Jaunpur District to the minimum of 64.8 percent in Basti District. Still more variations at the District level in the non-working population are noticed in respects of the male and female non-workers, their age groups and their rural-urban composition. Among the non-workers females dominate. For example, as per 1971 census in the total non-worker of Eastern Uttar Pradesh the proportion

of female non-workers was 59.3 percent. The remaining 40.7 percent was accounted for by male non-workers. If we take the proportion of male and female non-workers separately in the total male and female population of this region respectively, as per 1971 census the proportion of female non-worker was 90.7 percent and that of male non-workers was 48.0 percent.

The high percentage of non-workers among the females is partly because of a stricter definition of the term 'worker' in this census. The proportion of non-workers among the females rose from 63.9 percent in 1951 to 73 percent in 1961 and 90.7 percent in 1971. Thus there is a continuous rise in the proportion of non-workers among the females. In the case of males also, the proportion of non-workers rose to 48 percent in 1971 from 42.4 percent in 1961 and 41.4 percent in 1951. The proportion of non-workers among males and females at the District and Tahsil levels can be visualised from the analysis of the participation rates among males and females at these levels discussed earlier in this chapter ^{and} by the maps, diagrams and tables presented in these respects.

An analysis of the non-working population according to its age groups would clearly indicate the extent of the idle, effective and non-effective population at different levels of the age (Figs. 21.1, 21.2, 21.3 and 21.4). The preponderance of females children and old persons is a known factor adding to the strength of non-workers.

The analysis of the size of non-workers and its division into males and females classified by age groups, indicates that

there are thousands of persons in the age groups of effective population who are eligible and available to join the labour force but there are no jobs for them. Such non-workers inflate the size of unemployed persons in this region, although some persons in the effective population age groups also may not be physically or mentally fit to offer their services in the labour market but their size is very small. The categories of persons put under 'non-workers' consist of those persons also who are found doing no productive work irrespective of the fact that they derive some income from such sources as pension, rents etc. A non-worker is either engaged in household duties or does no productive work. Full time students attending schools, retired persons or rentiers etc. do not participate in the productive work of economic nature. Many others such as dependents, beggars, inmates of charitable or penal or mental institutions etc. are mostly unemployed persons and are, therefore, non-workers.

(vi) The change in the occupational structure of the working population:

The occupational structure of this region is predominantly agricultural. The services and industries play secondary role only. This shows unbalanced economic conditions of the Eastern Uttar Pradesh requiring changes in the region's occupational structure. In analysing this problem, we are, however, siezed with many problems and a number of questions naturally crop up. Here, in this chapter we shall analyse the problems facing this region and shall examine the need ways and desira-

bility of changes in the occupational structure of the population of this region.

The first question arises, whether it would be desirable to transfer a large number of workers from the primary sector to the secondary and tertiary sectors. Such a transference is considered not only desirable but also necessary in the interest of a balanced economy of the region. It is further suggested that this operation should be completed in the shortest possible time for the sake of fast development of this region. This line of thinking is based on the fact that agriculture has much larger number of workers than is needed for it. According to a rough estimate of economists of repute as many as 25 percent of agricultural workers are superfluous in this occupation. Their contribution in agriculture is practically very small.

Transference of workers from agriculture to other sectors may increase the productivity per worker and this in turn will help in the economic development of the region. Since productivity per head in industries and services is generally higher than in agriculture, such transference of workers from low to high productivity sectors will also result in higher regional and ultimately national productivity per head which will increase the total production. Besides, there will be more diversification of economic activities. As a consequence of such developments, the per capita income will increase provided the rate of population growth is kept within reasonable limits. Thus the occupational structure would undergo certain changes which may be desirable in the interest of welfare of

this region. But to effect such changes new jobs and opportunities will have to be created which in turn may have new problems.

In analysing the changes in the occupational structure of population one should be aware to seek solutions of some other questions also. These changes in the occupational structure should not be treated as independent goals in themselves to be pursued separately. They are in fact associated with general economic development of this region. Therefore, we should envisage these changes as a part of the larger scheme of regional development with a view to increase the national income. Due to growth of the secondary and tertiary sectors more workers will be drawn towards them and so the proportion of workers in the primary sector would decline. Yet the absolute number of workers will go on increasing due to increase in population and so the per capita income will decline inspite of the growth of these sectors. This will again inflate the absolute number engaged in the primary sector. The best solution for this would be to restrict the growth of population. The proportion and the absolute number of workers engaged in agriculture decline much only when the economy of a country has reached a higher stage of development.

A more crucial point in this region against its development is fast growing population. The changes in the economic structure will affect a large number of persons because of the consequential changes in the social and economic spheres operating in the society and they will have their effects on

the labour market also. Hence any sincere effort to provide gainful employment to all the eligible workers should keep in mind all those factors for a better solution of the problem.

In view of the above discussions, a realistic course would be to develop to the maximum possible extent the economic activities under the secondary and tertiary sectors so as to absorb in them as many new entrants from the labour force as possible so as to reduce the number of existing unemployed persons. This will bring down to some extent the proportion of working force engaged in the activities of the primary sector. In the beginning, at least for a few years, efforts should be made for more employment in the primary sector also by creating potentialities in it so as to engage more workers until we decide for a large scale mechanisation of agriculture in this region which is not possible in the present circumstances. For this we shall have to adopt such measures as the cultivation of newly reclaimed land, the increase in area under irrigation, greater use of organic and inorganic fertilisers, intensive cultivation, double cropping, mixed farming, proper land management, better animal husbandry, better and adequate credit market and large storage facilities for grains etc. Many of these improvements will require a larger labour force.

Such development programmes will certainly create employment potentialities to absorb many of the surplus and under employed agricultural labourers. However, certain measures such as consolidation of holdings and introduction of improved tool and implements etc. will tend to reduce the availability

of work for the labourers in agriculture. But taking an overall view at least for some years to come a demand for labour in agriculture may be increased till such time as the large scale mechanisation of agriculture does not take place.

From the above discussion it is clear that there are three main points for consideration. Firstly it is not possible at the moment to provide economically gainful employment to all the unemployed and underemployed labour force in the non-agricultural sectors. Secondly for a number of years to come we must look to the primary sector for providing a substantial number of additional jobs. And thirdly even if there may be increase in the number of workers engaged in the activities of primary sector in the early stage, yet it is bound to decline after some years. Hence this is a great problem in agriculture. However, it may add to the process of change in the economic structure of the region because of shifts in the occupational engagement of workers to other sectors of economic activities.

Details of statistical information regarding the economic characteristics of population and its occupational distribution are available in the census records. A critical but brief analysis of those informations is being presented through the following paragraphs.

5.3. The Census Records and Occupational Classification of Population:

Unfortunately it has not been possible to evolve a generally applicable scheme of occupational classification.

"The manner of classification of population according to occupations has not been uniform in different censuses. Not only the number of classes in which the population was distributed has been changing from census to census, but even the definition of the same classes has not been uniform throughout"¹. The definition of work has also undergone considerable changes.

One of the main features of the censuses of 1901, 1911 and 1921 was the classification of the population into 'Actual workers and Dependents'. "The term 'Actual worker' included all persons who actually did work or carried on business whether personally or by means of servants or who lived on house rent, pension etc. The persons, who were not actual workers were 'Dependents'".² The occupations of individuals were recorded under two heads: the main occupation and the subsidiary occupation. The occupation providing major source of income was treated as principal means of livelihood and the occupation having next best source of income was treated as subsidiary means of livelihood.

It was for the first time in 1931 census that some changes were introduced regarding the classification of population to make the census results more meaningful and purposeful. The population was divided into three classes namely, 'Earner', 'Working Dependant' and 'Non-working Dependant'. It is worthwhile to mention here that the censuses of 1911, 1921 and 1931 adopted the Bertillion classification of occupations and hence the occupations were classed into four main divisions and twelve subdivisions. In 1941 census, all persons were classified

into three categories: (i) Wholly Dependents, (ii) Partly Dependents and (iii) Independent workers.

"Important and far-reaching changes were introduced in 1951 census, the first census of independent India, regarding the individual's occupation and his means of livelihood".³ After considering the International Standard for Industrial Classification (ISIC) circulated by the United Nations Organisation (UNO), a scheme of classification of occupations was evolved and adopted in India known as the Indian Census Economic Classification Scheme (ICECS) to facilitate international comparison.

According to the scheme of occupational classification adopted in 1951 census, all occupations were divided into two main classes, each of which was further subdivided into four categories as stated below:

- (1) Agricultural Classes of Occupations: The persons following such occupations are subdivided into the following categories:
 - (I) Cultivators of land wholly or mainly owned by them and their dependents.
 - (II) Cultivators of land not wholly or mainly owned by them and their dependents.
 - (III) Cultivating labourers and their dependents.
 - (IV) Non-cultivating owners of land, agricultural rent receivers and their dependents.
- (2) Non-agricultural Classes of Occupations: They are subdivided into the following categories:
 - (V) Production other than cultivation.

- (VI) Commerce.
- (VII) Transport.
- (VIII) Services and miscellaneous activities.

According to the economic status the persons engaged in occupations were also classified under three categories as below: (I) Self supporting persons; (II) Non-earning dependents; and (III) Earning dependents. These categories were, however, less meaningful because the distinction between them was not quite clear, it was rather vague. All the eight livelihood classes were studied into parts "Dependency and Employment".

In 1961* census the entire population was classed into two categories as under: (1) the working population; and (2) the non-working population. Their details are given below:

(1) All working population (including children) were classified (according to their primary work) into nine livelihood classes (Industrial categories) mentioned below:

- (i) Working as cultivators.
- (ii) Working ^{as} Agricultural Labourer.
- (iii) Working in Mining, Quarrying, livestock, forestry, fishing, hunting, plantations, orchards and allied activities.
- (iv) Working ⁱⁿ ~~at~~ Household Industry.
- (v) Working in manufacturing other than Household industry.
- (vi) Working in construction.
- (vii) Working in Trade and Commerce.
- (viii) Working in Transport, Storage and Communication.
- (ix) Working in other services.

According to the economic status the persons engaged in occupations were also classified under four categories:

- (i) An Employer; (ii) An Employee; (iii) A Single worker; and
- (iv) A Family worker.

(2) The non-working population: According to the census of 1961, all persons who were not engaged in any work and consequently were not included in the categories of Working Population were classified under this group. Such a group included the persons of following categories:* (i) Whole time student; (ii) Persons engaged in Household duties; (iii) Dependants; (iv) Retired persons and ⁿretiers; (v) Beggars and Vagrants; (vi) Convicts in Jails, Inmates of penal, mental or charitable institution; (vii) Unemployed persons; (viii) Persons already employed but without employment at the time of enumeration.

In 1971 census,** the whole population has been classified into two broad categories of "Workers" and "Non-workers". The workers have further been categorised into four groups according to the type of main economic activity as stated below:

- (i) Cultivators (C)
- (ii) Agricultural Labourer (AL)
- (iii) Household Industry (HHI); and
- (iv) Other workers (OR)

* Census of India 1961 (General Economic Tables).

** Census of India 1971, Series I India, Part II-A(i), General Population Tables, pp. 21-31.

The type of workers engaged in the category of ^{functions} ~~workers~~ other than cultivation, agricultural labourer and household industry come under the category "other workers". The types of workers that come under this category are factory workers, those working in trade or transport, all government servants, municipal employees, teachers, mining workers, political or social workers, building labourers etc. Workers engaged in plantation and forestry have been treated as "other workers". Thus all the persons engaged in occupation have been classified into the nine livelihood classes:

- (i) Cultivators
- (ii) Agricultural labourers; *and those engaged in.*
- (iii) Forestry, fishing, hunting, livestock raising and other allied activities
- (iv) Mining and quarrying
- (v) Manufacturing, processing, servicing, repairs. This has been further divided into two subclasses:
 - (a) Household industry; ^{and} (b) Other than Household industry.
- (vi) Construction
- (vii) Transport, storage and communication
- (viii) Trade and commerce *and*
- (ix) Other services.

Every person engaged in main activity may belong to one of the following categories according to his economic status:

- (i) .An employer: He is one who hires one or more persons for his work.

- (ii) An employee: He is that person who does work for others for wages or salary in cash or kind.
- (iii) Single worker: He is that persons who is doing his work without employing others except casually and without the help of other members of his family except casually and in particular workers as a member of a cooperative society.
- (iv) Family worker: He is that person who is doing his work in a family enterprise alongwith other members of his family without wages or salary in cash or kind.

Further details of occupations of all the livelihood classes have been discussed in the respective chapters to follow. The economic activities have been further elaborated in Appendix 'A1 & A2' according to the nature of industry, trade, profession or services and occupations.

According to 1971 census if a person not doing any productive work during the reference period for enumeration, irrespective of whether he or she derived some income through such sources as pension, rents etc., was classified as a 'Non-worker'. A non-worker is a person who is either:

- (i) Engaged in household duties (all such persons are basically engaged in unpaid home duties and actually do no remunerative work; or
- (ii) is a full time student or child attending school; or
- (iii) is^h_^ retired person or a rentier etc.; or

- (iv) is a dependent including an infant or child not attending school or a person permanently disabled from work because of illness or old age; or
- (v) is a beggar, vagrant or independent women without indication of her source of income, or one with unspecified source of subsistence who is not engaged in any economically productive work; or
- (vi) is a convict in jail or an inmate of a penal, mental or charitable institution; or
- (vii) is a person who was not employed before but is seeking unemployment for the first time; or
- (viii) is a person who was employed before but is now out of employment and is seeking employment again.

All such persons were regarded as non-workers in the census of 1971 and they were classified as such.

5.4. A critical view:

The censuses of post-independence period have indeed great significance because they assimilated in their records the benefits of economic development programmes undertaken in the country within the frame work of the Five Year Plans. The 1971 census was the tenth decennial population census and it was the third census taken after independence. The 1951 census was followed by the First Five Year Plan and the 1961 census was followed by the Third Five Year Plan. This sequency has a greater significance regarding the statistics concerning the occupational distribution of population and employment of the

economically active population in particular and it also throws light on the changing pattern of our economy and helps in assessing the economic progress in the country in terms of per capita income and level of employment. The 1951 census was conducted just after the upheaval of partition of this country when we had hardly forgotten the ill-effects of that partition. Hence the 1961 census may be treated as the first comprehensive census conducted under normal conditions after re-establishing the economy within the two Five Year Plans.

The 1971 census was a more comprehensive and complete census of this century which proved more meaningful and purposeful. It was the opinion of the experts that in 1961 census, the definition of a worker was liberal which had inflated the participation rate because persons even with extremely marginal contributions to work were treated as economically active workers. In respect of seasonal work like agriculture or household industry, a person with even one hour's work per day during the major part of a working season was treated basically as an economically active worker. So much so that if a woman, basically busy with household duties, went to her husband's field taking his lunch and spent about an hour there or she minded the cattle for the time being, she was straight way treated as an active worker. Similarly if a full time student sat for a short time in his father's shop even on one day in a fortnight, he was also treated as an economically active worker. In case of a cultivator or an agricultural labourer or a worker in household industry, if there was no proper indication of

his main activity, the cultivation was treated as his main activity. This method introduced a definite bias in favour of the persons being categorised as cultivators.

Because of a change in the definition of a 'worker' as per census of 1971, the number of workers was considerably reduced in 1971 as compared to that of 1961. This does not mean that some persons were deprived of their work in 1971. If so happened because of the fact that the persons basically engaged as housewives, students etc., had not reported their main activity and so they were not taken as economically active workers because their contribution to work was not substantial. The persons with marginal contributions to work were classed separately as engaged in secondary activity in this census

However, for the purpose of the present study i.e. for an analysis of 'the occupational distribution of population in Eastern Uttar Pradesh', the structure of occupation was examined on the basis of the main activities of workers because the data for which alone was readily available. In view of the limitations on the part of researchers for field work and also due to vast dimensions of this work, the analysis of the occupational distribution of population based on workers' main activities alone cannot be taken to be inadequate or insufficient *under the existing circumstances.*

REFERENCES

1. Elhance, D.N. "Fundamentals of Statistics in India", Ed. 1972, Chapter 33, p. 841-42: "Statistics of Occupation".

2. Census of India 1971, "Provisional Population Totals" Paper I of 1971, supplement, Chapter III: "Working Population", p. 24.
3. Asthana, B.N. and Srivastava, S.S. "Applied Statistics of India", Ed. 1972, Chapter III: "Population Statistics", p. 92.

CHAPTER VI

DISTRIBUTION OF WORKING POPULATION GAINFULLY
ENGAGED IN OCCUPATIONS OR ECONOMIC ACTIVITIES OF
PRIMARY SECTOR

CHAPTER VIDISTRIBUTION OF WORKING POPULATION GAINFULLY ENGAGED IN
OCCUPATIONS OR ECONOMIC ACTIVITIES OF PRIMARY SECTOR

Most of the people of the rural as well as urban areas are engaged in one or the other of a great variety of occupations for earning their livelihood: Whatever may be the nature of their occupations, these activities have two aspects in common. Firstly they are done for earning either in cash or in kind. Secondly they also contribute to the production of goods or in running the services needed by the society. In the modern World one can earn his living through various ways e.g., Farming, mining, manufacturing, trade, transport, banking, services of various kinds etc. which are some of a large number of occupations open to man. Among them, agriculture and allied activities are very old.

6.1. General Distribution:

According to 1971 Census as much as 84.10 percent of the total working population of Eastern U.P. was engaged in agriculture and its allied activities and in mining and quarrying. A vast majority of the total population of this region is dependent upon agriculture for its living. Agriculture and its allied activities together with mining and quarrying have been put under the category of the Primary Sector of occupations or economic activities.

Agriculture itself is a comprehensive term and it is not so easy to define it and to categorise the population

engaged in it. The main sources of information and data in this regard are the Census Reports which are not strictly comparable because of the changing definition of a 'Worker' distinguishing him or her from a 'Non-worker'. "The term 'agriculture' includes all the productive activities of the soil undertaken by man such as the production of vegetable and food grains by the cultivation of the soil".¹ Agriculture may also include the allied activities such as the breeding of cattle, hunting, fishing, forestry, gardening etc. In this sense milk meat and wool are as much agricultural products as are wheat, rice and cotton. Agriculture, is therefore, a basic activity of man and hence is regarded as a primary sector activity. It provides most of the food stuffs and also some of the essential raw materials for industry. Mining and quarrying are the extractive activities of the rocks and they are also basic activities. As such they have also been regarded as the activities of the Primary Sector which is associated with the direct tapping of the natural resource base.

The persons engaged in the activities of the primary sector have not been uniformly classified in the different Censuses. In 1951 Census the agricultural classes of persons were grouped into four categories*, whereas in 1961 census they

* 1951 Census classified the persons engaged in the activities of Primary sector into: (i) Cultivators of land wholly or mainly owned and their dependants; (ii) Cultivators of land wholly or mainly unowned and their dependants; (iii) Cultivating labourers and their dependants; and (iv) Non-cultivating owners of land; agricultural rent receivers and their dependants.

were grouped into three categories* only. In 1971 census they were again grouped into four categories**.

According to 1971 census, out of 84.1 percent of the total working population engaged in different categories of activities of the Primary Sector, cultivators alone constituted 55.3 percent followed by agricultural labourers who accounted for another 28.4 percent. The allied activities such as live-stock rearing, forestry, fishing, hunting, plantation, orcharding and such other activities engaged 0.4 percent only while mining and quarrying accounted for 0.03 percent only. This indicated that the activities connected with III and IV categories were insignificant. This shows very less diversification of economic activities under this sector in this region. The activities of the third category can be developed much in this region but those of the IV category have great limitations because of the younger rock structures and special type of geological formations found in this region except the southern part of Mirzapur District.

The heavy reliance on agriculture in Eastern Uttar Pradesh is indicative of the fact that this region enjoys

* 1961 Census classified the persons engaged in the activities of Primary Sector into: (i) Persons working as cultivators; (ii) Persons working as agricultural labourers; and (iii) Persons working in mining, quarrying, livestock, rearing, forestry, fishing, hunting, plantations, orchards and allied activities.

** 1971 Census classified the persons engaged in the activities of primary sector into: (i) Cultivators; (ii) Agricultural labourers; (iii) those engaged in rearing of livestock, forestry, fishing, hunting, plantation, orchards and allied activities; and (iv) those engaged in mining and quarrying.

certain physical and climatic advantages conducive for the development of agriculture. The vast Ganga plain consisting of thick alluvial soil is the best fertile tract of the country. The rain fall is usually normal here though not fully adequate for the year round cultivation. Hence irrigation facilities have been developed on a fairly good scale in this region. Since other sectors of economic activities are relatively less developed here, so also a large proportion of the working population is engaged in cultivation in this region. Most of the cultivated area is devoted to cereal crops. Only a small proportion of the area is utilized for growing the industrial and cash crops. The cattle breeding, poultry farming etc. have not also been well developed in this region and so they have enough scope for development.

Besides giving the participation rates of persons engaged in the activities of different categories in the primary sector at the District level, the table VI-1 also shows the strength of workers (*in proportion*) engaged in those categories in Eastern Uttar Pradesh. A perusal of the table V.1 points out that 9.44 million working population (constituting 84.8 percent of the total working population of the region) engaged in the activities of the primary sector as per 1951 census. This increased to 9.48 million in 1961 but declined to 8.24 million in 1971. This had been the general trend in relation to the strength of working population engaged in the activities of different categories of primary sector in other regions of the country also. But there was some difference with each

category of workers. The situation is more interesting when one compares the strength of workers engaged in each category of primary sector in 1961 with that category in 1971 because a marked decline is noticed in 1971. For example at 1961 census about 7.5 million persons were recorded as cultivators constituting 66.1 percent of the total working population of this region but this number declined to 5.4 million constituting only 55.3 percent of the total working population of this region at 1971 census.

The strength of agricultural labourers has, however, increased. It was only about 1.9 million in 1961 but went up to 2.8 million in 1971. This tremendous increase in the strength of agricultural labourers, swelled their proportion from 16.9 percent in 1961 to 28.4 percent in 1971. As regards the proportion of workers engaged in the third category of primary sector at 1961 census and in the III and IV categories at 1971 census, only a small change was noticed as they constituted 0.4 percent and 0.43 percent of the total working population of the region in 1961 and 1971 respectively, although the strength of workers engaged in them declined from 45,899 persons in 1961 to 41,755 persons in 1971. Thus there was a big shift of workers from cultivation to agricultural labour in this region as well as in almost all of its Districts. It does not mean that a large number of persons who were owners and cultivators of land in 1961 became landless agricultural labourers in 1971. It so happened because in 1961 a liberal attitude was adopted in favour of the persons recording themselves as

Distribution of workers engaged in the different categories of Economic Activities of the
the Primary sector at the District level, during the period 1951-71

Name of the district/region/ state/country	Categories of Economic Activities										No.				
	1951 census				1961 census			1971 census							
	I	II	III	IV	Total	I	II	III	Total	I		II	III	IV	Total
1. Bahraich	72.8	10.7	6.2	0.8	90.5	78.8	9.8	0.3		88.9	76.8	14.1	0.5	19	91.4
2. Gonda	70.5	10.7	6.5	0.4	88.1	76.3	11.9	0.3		88.5	70.9	18.9	0.4	127	90.2
3. Faizabad	67.2	9.6	8.1	0.4	85.3	63.2	19.2	0.3		82.7	56.7	26.6	0.4	75	83.7
4. Sultanpur	68.6	6.7	13.1	0.3	88.7	62.0	23.8	0.2		86.0	56.6	31.6	0.2	24	88.4
5. Pratapgarh	71.4	4.3	11.5	0.3	87.5	69.3	17.8	0.1		87.2	61.6	26.0	0.1	64	87.8
6. Basti	79.7	3.8	7.5	0.3	91.3	77.3	14.2	0.1		91.6	64.6	26.0	0.2	108	90.9
7. Gorakhpur	77.3	1.5	8.8	0.1	87.7	65.2	19.6	0.2		85.0	46.6	37.9	0.4	248	84.9
8. Deoria	85.6	1.6	6.8	0.1	94.1	73.6	17.1	0.1		83.8	57.7	31.6	0.2	226	89.5
9. Azamgarh	71.7	4.1	7.8	0.6	84.2	64.3	16.7	0.3		81.3	54.4	27.9	0.4	404	82.8
10. Jaunpur	65.6	10.8	6.6	0.8	83.8	70.7	13.6	0.4		84.7	59.8	23.8	0.3	184	84.0
11. Ballia	46.7	15.5	11.7	0.9	74.8	55.5	19.1	0.3		74.9	43.6	38.8	0.6	204	83.0
12. Ghazipur	56.9	9.3	11.1	0.8	78.1	62.6	16.2	1.0		79.8	51.5	30.5	0.6	168	82.7
13. Varanasi	40.8	13.5	7.6	0.9	62.8	41.7	17.5	0.8		60.0	33.3	25.1	0.8	402	59.2
14. Mirzapur	48.1	9.4	20.2	0.4	78.1	48.7	25.8	2.2		76.7	38.8	40.8	0.6	2	80.4
15. Allahabad	66.9	8.8	7.3	0.3	83.3	68.0	16.6	0.1		84.7	53.7	29.1	0.2	111	83.1
Eastern U.P.	68.3	7.2	8.8	0.5	84.8	66.1	16.9	0.4		83.4	55.3	28.4	0.4	0.03	84.1
Absolute No.															
Uttar Pradesh	63.0	5.8	6.9	1.0	76.7	63.9	11.3	0.6		75.8	57.4	20.0	0.6	0.04	78.0
India					72.1					71.8					72.1

Source: Percentage figures for each category have been calculated from data:

(i) Census of India 1951 Part II B, Economic Tables, Ed. 1952, pp. 34-73.

(ii) Census of India 1961, Paper No.1, 1961, Ed. 1962, pp. 53-55.

(iii) Census of India 1971, Series 21, Uttar Pradesh, Part II-A General Population Tables, pp. 316-323.

(iv) Census District Census Handbooks, 1951, 1961 and 1971.

cultivators. Many persons who were basically agricultural labourers were treated as cultivators in 1961.

According to 1961 census the proportion of cultivators varied at the District level from the maximum of 78.8 percent (for Bahraich) to the minimum of 41.7 percent (for Varanasi) and in case of agricultural labourers it varied from the maximum of 25.8 percent (for Mirzapur) to the minimum of 9.8 percent (for Bahraich). As per 1971 the ~~pro~~portion of cultivators varied from the maximum of 76.8 percent again (for Bahraich) to the minimum of 33.3 percent (for Varanasi) again. In case of agricultural labourers the highest proportion of 40.8 percent was recorded by the District of Mirzapur and lowest of 14.1 percent by the District of Bahraich. This means that there was a fall in the proportion of cultivators and a rise in the proportion of agricultural labourers in 1971 over their proportion in 1961ⁱⁿ all the Districts of this region. The maximum fall in the proportion of cultivators was noted in the District of Gorakhpur, where it fell from 65.2 percent in 1961 to 46.6 percent in 1971. The highest rise in the proportion of agricultural labourer was witnessed in the District of Ballia where it went up from 19.1 percent in 1961 to 38.8 percent in 1971. However, in the case of workers engaged in the III and IV categories of the primary sector no substantial change was noticed during the period 1951-71.

(i) Distribution of workers engaged in the activities of Primary sector according to sex:

At 1971 census, the proportion of the total male working population, engaged in primary sector was 83.1 percent and that for female workers was 90.5 against similar figures 77.0 percent and 87.6 percent respectively for the whole of Uttar Pradesh. It shows that the female workers contributed more significantly to the activities of primary sector in Eastern Uttar Pradesh than ⁱⁿ the rest of this State.

At the District level the proportion of male workers in the primary sector to the total male workers varied from a minimum of 56.4 percent (for Varanasi) to the maximum of 91.3 percent (for Bahraich) and for female workers it varied from a minimum of 78.8 percent (for Varanasi) to the maximum of 94.8 percent (for Basti).

It is evident from the table VI-2 that the female participation in the activities of primary sector is more pronounced in the Trans-Ghaghra and Southern upland regions than in the Doab region. The variations in the proportions of male and female participation in the activities of the primary sector indicate in clear terms the micro-variations in social cultural economic and demographic conditions of different parts of this region also. Varanasi District having 17.54 percent of its population as urban shows the minimum proportion of participation for males as well as females in this region.

Although the female participation in the activities of primary sector is more pronounced yet it is not the same

Table VI-2

Proportions of male and female workers engaged in different industrial categories to the total male and female workers, 1971*

Name of the District/Region/State	Industrial categories of primary sector							
	I. Cultivation		II. Agricultural labourer		III. Livestock, Forestry, Fishing, Hunting etc.		IV. Mining & quarrying	
	Male	Female	Male	Female	Male	Female	Male	Female
1. Bahraich	78.2	49.8	12.7	41.4	0.4	0.9	18	1
2. Gonda	73.9	43.8	15.7	49.2	0.4	0.2	125	22
3. Faizabad	61.0	29.0	21.0	61.5	0.5	0.3	74	1
4. Sultanpur	61.4	28.8	25.9	64.0	0.2	0.2	22	2
5. Pratapgarh	66.3	42.5	19.7	51.5	0.1	0.06	63	1
6. Basti	69.9	32.9	20.1	61.8	0.2	0.1	97	11
7. Gorakhpur	51.9	18.4	30.9	75.6	0.4	0.3	211	37
8. Deoria	62.8	21.1	25.7	73.7	0.2	0.1	223	3
9. Azamgarh	60.6	23.5	21.7	59.1	0.4	0.5	375	29
10. Jaunpur	63.7	35.8	18.8	54.4	0.3	0.2	168	16
11. Ballia	49.3	12.4	31.9	76.4	0.7	0.4	198	6
12. Ghazipur	56.3	29.7	24.6	56.5	0.6	0.7	152	6
13. Varanasi	35.6	17.8	19.9	60.0	0.8	0.85	390	12
14. Mirzapur	44.8	16.1	31.5	77.0	0.6	0.3	805	205
15. Allahabad	58.6	33.8	22.6	55.7	0.16	0.10	97	14
E.U.P.	60.1	27.1	22.6	63.1	0.4	0.3	0036	0025
Absolute No.	5040702	380405	1892883	885345	33563	6735	3028	346
U.P.	59.1	42.6	17.2	44.5	0.6	0.63	0.04	0.05
Absolute No.	14515674	1182192	4220484	1233345	154706	12369	9756	1422

* For the fourth industrial category the figures show absolute number male and female workers engaged because proportion is negligible.

in the case of all the industrial categories. The table VI-2 shows the participation rates among males and females in different industrial categories of this sector in this region.

Of the total 8.39 million male workers in this region as many as 5.04 million were engaged in cultivation and another 1.89 million in agricultural labour, accounting for 60.1 percent and 22.6 percent respectively as compared to 59.1 percent and 17.2 percent respectively for the whole of Uttar Pradesh. This indicates that the proportion of male workers in cultivation is slightly more but in agricultural labour it is widely more in this region. In the third and fourth industrial categories the proportion of workers (both male and female) is quite nominal in this region as well as in this state. For example, in the third industrial category only 0.4 percent of the total male workers was engaged in this region as against 0.6 percent in the state of Uttar Pradesh. In the case of fourth industrial category i.e. mining and quarrying only 3,028 male workers were engaged in this region.

As regards the proportion of female workers engaged in the different industrial categories of the primary sector, the maximum proportion of 63.1 percent of the total female workers of this region was engaged in agricultural labour followed by their 27.1 percent in cultivation and 0.3 percent in the third industrial category. Their participation in the activities of the fourth industrial category was almost negligible as only 346 females worked in mining and quarrying in the region in 1971. The variations in the distribution of female workers

engaged in each industrial category of this region at the district and tahsil levels will be discussed in detail elsewhere in this chapter. The above discussion of the proportion of both male and female workers engaged in different industrial categories of the primary sector in this region clearly indicates that the female workers are not usually independent cultivators on their own fields but they mostly work in the fields of others as paid agricultural labourers. This indicates the deplorable economic condition prevailing in this region.

(ii) Distribution of workers by age groups:

The distribution of workers of this sector classified by age groups tells as how the persons from different age groups contribute to the labour force and hence to the regional productivity. Although the persons of the effective age group (15 to 59 years) are major contributors to the working population always, yet the contributions made by other age groups cannot be underestimated in many respects. Indeed they have much importance in this region due to its economic backwardness, particularly in relation to the activities of the primary sector, because children had to work on fields from their early childhood in absence of the facilities available to most of them for being educated and properly looked after. The aged persons also practically do not retire from their economic activities and they continue to contribute to the productivity of this region almost till their last days.

The break up of 84.1 percent of the total working population of the region, engaged in different economic activities of the primary sector, classified by sex and age groups presents quite interesting results (table VI-3). The maximum proportion of the workers groups of 0-14 years and 60 years and above of this region was engaged in the activities of this sector only. The distribution of the working population of this region engaged in this sector classified by age groups points out that the persons from the effective population age group (15 to 59 years) composed 69.4 percent of this population and they were major economic contributors, while the children (0-14 years) and old and retired persons (60 years and above) composed only 4.9 percent and 9.8 percent of this population respectively and they were minor economic contributors. These figures for the region of Eastern Uttar Pradesh compare well with 64.8 percent, 4.2 percent and 9.0 percent respectively for the whole of Uttar Pradesh. Thus the contribution made by the male and female workers under the age groups other than the effective population age group is indeed of somewhat importance as the workers of those age groups taken together constituted as much as 14.7 percent of this population in this region as compared to 13.2 percent for the whole of Uttar Pradesh. Their contribution to this sector holds particular significance because of the fact that the maximum participation of children and old and retired persons is seen in this sector as compared to their participation in other sectors.

If we take the break up of male and female workers as separately classified by age groups, still more interesting

facts are brought to light. The proportion of female workers to the total female working population of the region is higher in the age groups of 0-14 years and 15-59 years than that of the males while it is higher for males than females within the age group of 60 years and above. According to 1971 census, female workers constituted 8.2 percent and 74.8 percent of their working population as against 4.3 percent and 68.6 percent constituted by male workers in the age groups of 0-14 years and 15-59 years respectively. But in the age group of 60 years and above the proportion of female workers was 7.4 percent and that of male workers was 10.2 percent. The lower proportion of female workers than male workers in this advanced age group can be partly explained on account of the fact that the females usually develop disabilities in their advanced age and do not participate in the labour force due to their multifarious engagements at the home front also. The above discussion reveals the general pattern of distribution of male and female workers, classified by age groups engaged in the activities of the primary sector in this predominantly agricultural region of Eastern Uttar Pradesh. Although a similar pattern of distribution of male and female workers is witnessed in almost all the Districts of the region except a singular example of deviation from the general pattern in case of workers under the age group 60 years and above in the District of Bahraich where the proportion of male workers was 8.7 percent as against 12.2 percent for females. This is clearly indicative of the backward economy of the District where even the aged women have to

Table VI-3

Proportional distribution of total, male and female workers classified by age groups engaged in the economic activities of primary sector of Eastern Uttar Pradesh, 1971.
Figures are in percent.

Name of the Districts, Region, State	Contributions made by persons of Different age groups												
	0-14 yrs		15-59 year		60 years and above		Percent of workers in 0-14 yrs		Percent of workers in 60 yrs & above				
	T	M	T	M	T	M	T	M	T	M			
	F	F	F	F	F	F	F	F	F	F			
1. Bahraich	6.4	6.3	7.7	76.1	76.0	72.3	8.9	8.7	12.2	95.4	95.8	93.9	93.7
2. Gonda	5.6	5.5	6.5	75.4	75.2	77.7	9.2	9.2	8.9	95.5	95.1	93.3	94.0
3. Faizabad	4.0	3.5	7.0	63.5	68.4	75.2	10.2	10.5	8.6	81.3	92.3	89.3	95.7
4. Sultanpur	3.2	3.3	4.4	73.9	72.5	78.5	11.3	11.7	9.3	92.0	93.5	92.8	93.5
5. Pratapgarh	4.3	3.7	6.9	71.7	70.1	77.8	11.8	12.3	9.3	92.7	95.4	91.9	94.8
6. Basti	5.5	4.9	9.2	75.7	75.4	78.5	9.7	10.0	7.1	95.8	97.1	94.0	94.8
7. Gorakhpur	5.1	4.4	9.8	70.9	69.6	77.7	8.9	9.2	6.8	93.3	96.5	90.7	93.9
8. Deoria	5.6	4.9	10.5	73.7	73.5	75.7	10.2	10.3	3.3	94.4	96.4	94.2	95.2
9. Azamgarh	5.2	4.4	8.9	66.6	66.1	69.9	11.0	12.2	5.2	37.2	84.0	20.0	27.7
10. Jaunpur	3.7	3.3	6.7	69.7	68.7	77.3	10.6	10.9	3.0	87.8	92.6	90.6	92.7
11. Ballia	5.2	4.8	7.2	67.4	66.0	77.0	10.4	11.1	5.9	93.2	83.7	86.9	90.5
12. Ghazipur	4.1	3.6	6.5	66.1	64.5	73.6	12.5	13.5	7.6	86.4	84.2	89.2	90.0
13. Varanasi	2.8	2.3	6.1	45.7	45.3	66.4	7.7	7.8	6.3	49.6	80.0	71.9	79.1
14. Mirzapur	6.4	5.1	11.4	65.9	72.5	76.5	8.1	8.7	5.6	83.7	94.8	85.4	89.6
15. Allahabad	4.4	3.5	8.1	69.9	69.7	77.1	8.8	9.3	6.6	73.6	95.0	83.5	91.5
E.U.P.	4.9	4.3	8.2	69.4	68.6	74.8	9.8	10.2	7.4	87.9	92.2	96.9	91.6
U.P.	4.2	3.8	8.1	64.8	64.0	72.4	9.0	9.2	7.1	85.6	91.4	84.8	88.2

Source: Figures in percent are calculated and based on data

(i) Census of India 1971, Series 21, Uttar Pradesh Part II-3 (i) General Economic Tables, Ed. 1973, pp. 2-135.

(ii) District Census Handbooks, 1971.

participate in the work despite their disabilities of the advanced age to supplement their family income.

The variation of greater magnitude come to light when figures for male and female workers are analysed separately at the District level. For example in the case of workers in the age group of 0-14 years engaged in the activities of the primary sector, the proportion varied from the maximum of 6.4 percent in Bahraich and Mirzapur Districts to the minimum of 2.8 percent in Varanasi District and in the case of workers in the age group of 60 years and above it was highest (12.5 percent) in Ghazipur District and lowest (7.7 percent) in Varanasi District. The proportion in the case of workers in the age group of 15-59 years varied from the maximum of 76.1 percent in Bahraich District to the minimum of 48.7 percent in Varanasi District. The majority of workers under effective population age group was engaged in the primary sector but their proportion varied widely from one sub-region to another. All the Districts of the Trans-Ghaghra sub-region except that of Gorakhpur (where the proportion was only 70.9 percent) showed that more than 75 percent of their working population was engaged in the activities of the primary sector, while in Doab sub-region the proportion of working population engaged in this sector varied from the maximum of 73.9 percent (Sultanpur District) to the minimum of 66.1 percent (Ghazipur District). The District of Varanasi with 48.7 percent is an exception because of its urban functions being more popular due to a large proportion of urban population living within its limits.

The District of Mirzapur is quite distinct in this region on account of many special factors. It is different in respects of physical features, socio-economic pattern, demographic structure and industrial resources.

It is even more meaningful to study and analyse the distributional pattern of male and female workers by rural and urban areas engaged in the economic activities of primary sector in this region as there exists a great difference between the rural and urban functions. Thus although the activities of the primary sector do not hold significant place in the urban areas, yet they carry some weight and hence the persons engaged in such activities there also need a reference

(iii) Distribution of workers engaged in primary sector by rural and urban areas:

Eastern Uttar Pradesh is a less urbanised region of the country. Even more important is the fact that only 28.2 percent of its total urban population accounted for as workers according to 1971 census. As the activities of primary sector do not form the part and parcel of urban functions, so only a limited proportion of urban workers were engaged in such activities. The table VI-4 provides the details of both male and female workers engaged in the activities of the primary sector at the District level.

In this region 89.1 percent of the total workers were engaged in the primary sector in its rural areas whereas 11.5 percent were engaged in its urban areas. These figures compare

Table VI-4

Distribution of workers engaged in the primary sector in Eastern Uttar Pradesh in its rural and urban areas by sexwise categories, 1971

Name of the District/Region or State	Proportion of the male and female workers of the primary sector separately in rural and urban areas of each District of Eastern U.P.				Percentage of male or female workers separately in each District			
	Rural		Urban		Total		Total	
	Total workers	Male workers	Female workers	Total workers	Total workers	Male workers	Female workers	Total workers
1. Bahraich	95.0	94.9	95.7	21.3	21.3	21.5	18.7	21.3
2. Gonda	93.7	93.6	95.2	15.6	15.6	15.3	19.8	15.6
3. Faizabad	90.2	89.5	94.4	14.2	14.2	13.7	19.7	14.2
4. Sultanpur	89.8	95.0	93.6	06.3	06.3	06.2	07.6	06.3
5. Basti	92.5	91.9	95.6	26.6	26.6	25.3	44.4	26.6
6. Pratapgarh	89.2	87.8	90.1	08.3	08.3	07.4	20.1	08.3
7. Gorakhpur	90.3	89.2	94.3	05.1	05.1	05.0	06.7	05.1
8. Deoria	91.4	90.8	95.2	20.1	20.1	19.6	32.4	20.1
9. Azamgarh	87.8	87.2	90.1	07.2	07.2	07.8	05.3	07.2
10. Jaunpur	88.2	87.6	93.9	18.6	18.6	18.2	27.5	18.6
11. Ballia	85.5	84.8	89.2	26.6	26.6	24.1	52.1	26.6
12. Ghazipur	86.1	84.6	99.2	18.2	18.2	17.7	21.8	18.2
13. Varanasi	76.3	74.2	88.2	05.5	05.5	05.3	07.4	05.5
14. Mirzapur	88.7	86.6	95.7	13.2	13.2	11.7	32.4	13.2
15. Allahabad	83.8	82.3	89.9	23.7	23.7	20.8	52.4	23.7
Eastern U.P.	89.1	88.5	94.5	11.5	11.5	11.1	11.7	11.5
Uttar Pradesh	87.7	87.1	92.6	10.6	10.6	10.5	12.6	10.6

well with 87.7 percent and 10.6 percent respectively for the whole State of Uttar Pradesh. In case of males and females separately it also did not vary much. For example, according to 1971 Census for males it was 88.5 percent and for females 94.5 percent in the rural areas of the region while in urban areas it was 11.1 percent for males and 11.7 percent for females. They also compare well with the figures for whole U.P.

A variation of considerable magnitude is witnessed for both males and females at the District level in this region. The proportion in case of male workers varied from the maximum of 95.0 percent for Sultanpur District to the minimum of 74.2 percent for Varanasi District for rural areas, while for female workers the highest was 99.2 percent for Ghazipur District and the lowest was 88.2 percent for Varanasi District. For urban areas the highest was 25.3 percent for Basti District and the lowest was 50 percent for Gorakhpur District in case of male workers. In case of female workers it varied from the maximum of 52.1 percent in Ballia District to the minimum of 5.3 percent in Azamgarh District. It is quite evident from the above discussion that in rural areas in almost all the Districts of this region the proportion of female workers was more than that of male workers. In urban areas also a similar pattern is noticed with exception of Bahraich and Azamgarh Districts where the proportion of female workers was less than that of male workers. But in absolute number, the male workers always outnumber female workers in both rural and urban areas of all the Districts of this region.

6.2. Distribution of workers engaged in primary sector by livelihood classes:

According to 1971 census the working population under primary sector is classified by its main activity into four livelihood classes as follows: (a) Cultivators; (b) Agricultural labourers; (c) Livestock, Forestry, Fishing, Hunting, Plantation, Orchards and Allied activities; and (d) Mining and Quarrying. The details are given below:

(a) Cultivators: A person is a cultivator if he or she is engaged in cultivation by oneself or by supervision or direction of one's capacity as the owner or lessee of land held from Government or as a tenant of land held from private persons or institutions for payment of money, kind or share. The cultivation involves ploughing, sowing and harvesting of cereals and millet crops, such as wheat, paddy, jowar, bajra, ragi etc., pulses, and fibre crops, such as jute, cotton etc. and does not include fruit growing, vegetable growing or keeping orchards or groves or plantation like tea or medicinal plants etc. However, a person who merely owns land but has given out it to another person or persons for cultivation for money, kind or share of crop and who does not supervise or direct cultivation of land himself has not been regarded as cultivator. The workers enumerated as cultivators have been classed and sub-classed in major and minor occupational or industrial groups which need no mention in this connection. However, all these minor groups, classes and sub-classes are very much associated with cultivation of land. Cultivation is the single largest livelihood

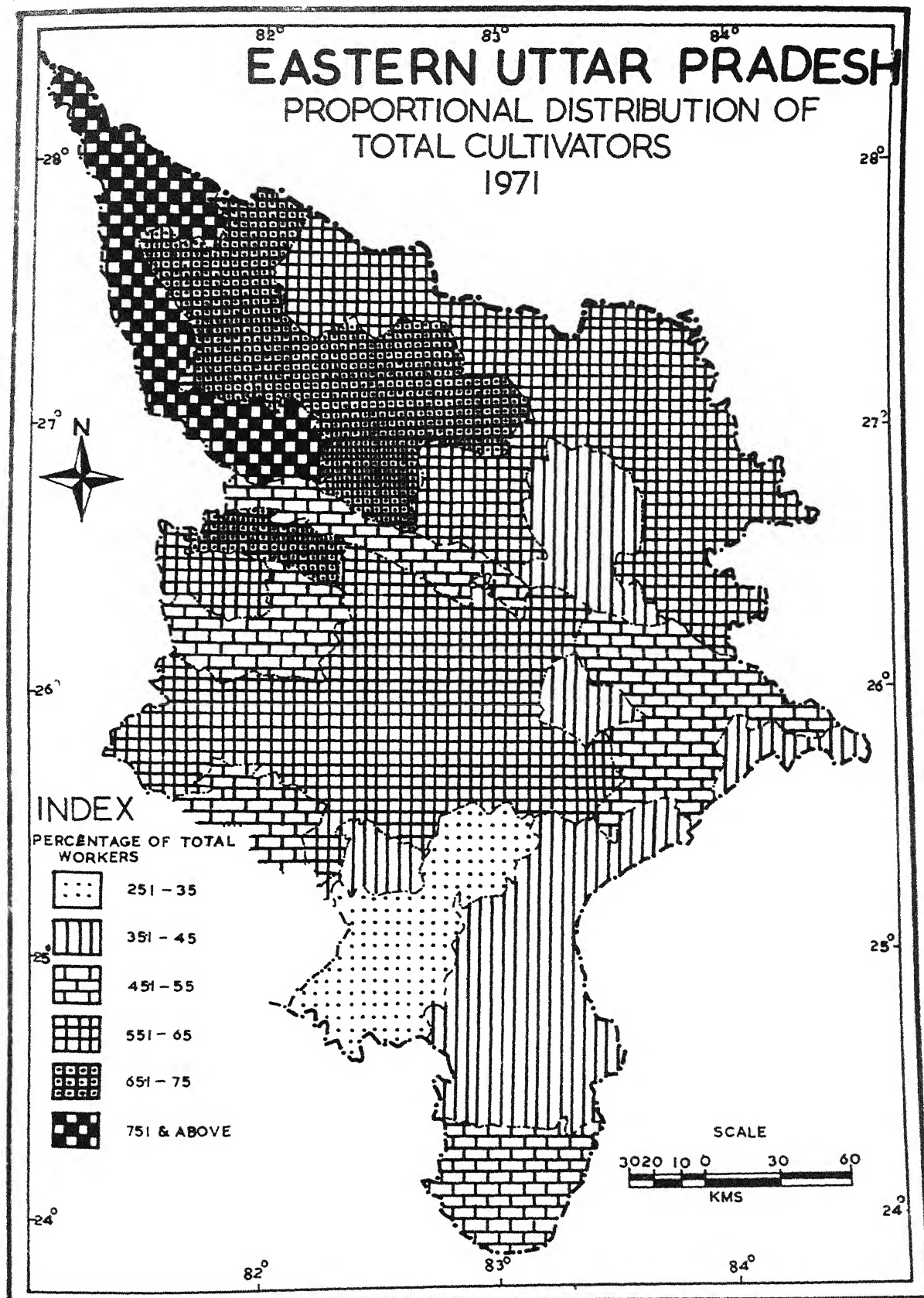
class of the primary sector. According to 1971 census, about 55.3 percent of the total workers of this region ^{was} ~~were~~ engaged in cultivation and this proportion accounted for 5.4 million persons, out of which 5.042 million were males and 0.38 million females. Thus males outnumbered the females in a great way. Therefore, as regards the participation of females in cultivation, it stands no comparison with that of males. But if the proportion of male and female workers engaged in cultivation are taken separately out of male and female workers engaged in primary sector, some interesting results come out. The proportion of female workers engaged in cultivation gets inflated because the total number of female workers is less pronounced. However, in almost all the Districts and Tahsils of the region the proportion of male workers outnumber that of females. In 1971 in this region 60.1 percent of the total male workers and 27.1 percent of the total female workers were engaged in cultivation". In case of the rural and urban areas of this region separately, the proportion of male workers was 64.1 percent in rural and 5.7 percent in urban areas while in the case of female workers it was 27.1 percent in rural and 2.4 percent in urban areas. This proves beyond doubt that in case of the livelihood class "cultivation" it is invariably the males who outnumber females.

There is a marked variation at the District level in the proportion of male and female workers engaged under the livelihood class "cultivation". In case of male workers the proportion varied from the maximum of 78.2 percent in Bahraich

District to the minimum of 35.6 percent in Varanasi District, while for female workers it varied from the maximum of 49.8 percent in Bahraich District to the minimum of 12.4 percent in Ballia District. This shows that the distribution of male and female workers engaged in cultivation, far from being uniform and the variation is more pronounced in case of female workers than that of male workers. The factors responsible for such variation are complex in nature and they are partly socio-economic and partly demographic in character.

The cultivation as the livelihood class has been the largest industrial category engaging the maximum proportion of workers at the District level except Mirzapur District even at the tahsil level in this region, Almost similar conditions are witnessed in fifty four tahsils out of a total of 61 tahsils constituting the region of Eastern Uttar Pradesh. Remaining seven tahsils showing a different pattern than the rest are Gorakhpur and Bansgaon in the Trans-Ghaghra sub-region; Ballia and Zamania in Doab sub-region, and Mirzapur, Robertsganj and Chakia in the southern upland region where the cultivation does not form the largest livelihood class. Instead its place has been taken by the second industrial category of workers under the primary sector i.e. "Agricultural labourer". In case of cultivation in absolute number as well as in proportion of male and female workers, it is seen that the males outnumber the females even at the Tahsil level.

The proportion of workers (both males and females) engaged in cultivation varied from the highest of 84.3 percent



FIGNO 28

in Kaiserganj Tahsil to the lowest of 26.9% in Varanasi tahsil. The Tahsil Kaiserganj had no urban population and hence has little urban functions and activities and this is why the maximum proportion of workers was engaged in cultivation there. On the contrary in the tahsil of Varanasi the city of Varanasi with its urban activities is located and this is why it has preponderance of urban functions rather than cultivation. A small proportion of persons engaged in cultivation here is also mostly due to some rural population included within the limits of this tahsils. Based on the proportion of workers engaged in this category at the tahsil level, six categories* have been recognised at the interval of 10 percent (Fig. 28).

Out of 61 tahsils comprising Eastern Uttar Pradesh, thirty six tahsils i.e. more than 60 percent of tahsils maintained greater proportion than 55.30 percent which was the average for this region of the workers engaged under the

First category (75.10 percent and above): There are 3 tahsils: Nanpara, Kaiserganj and Tarabganj.

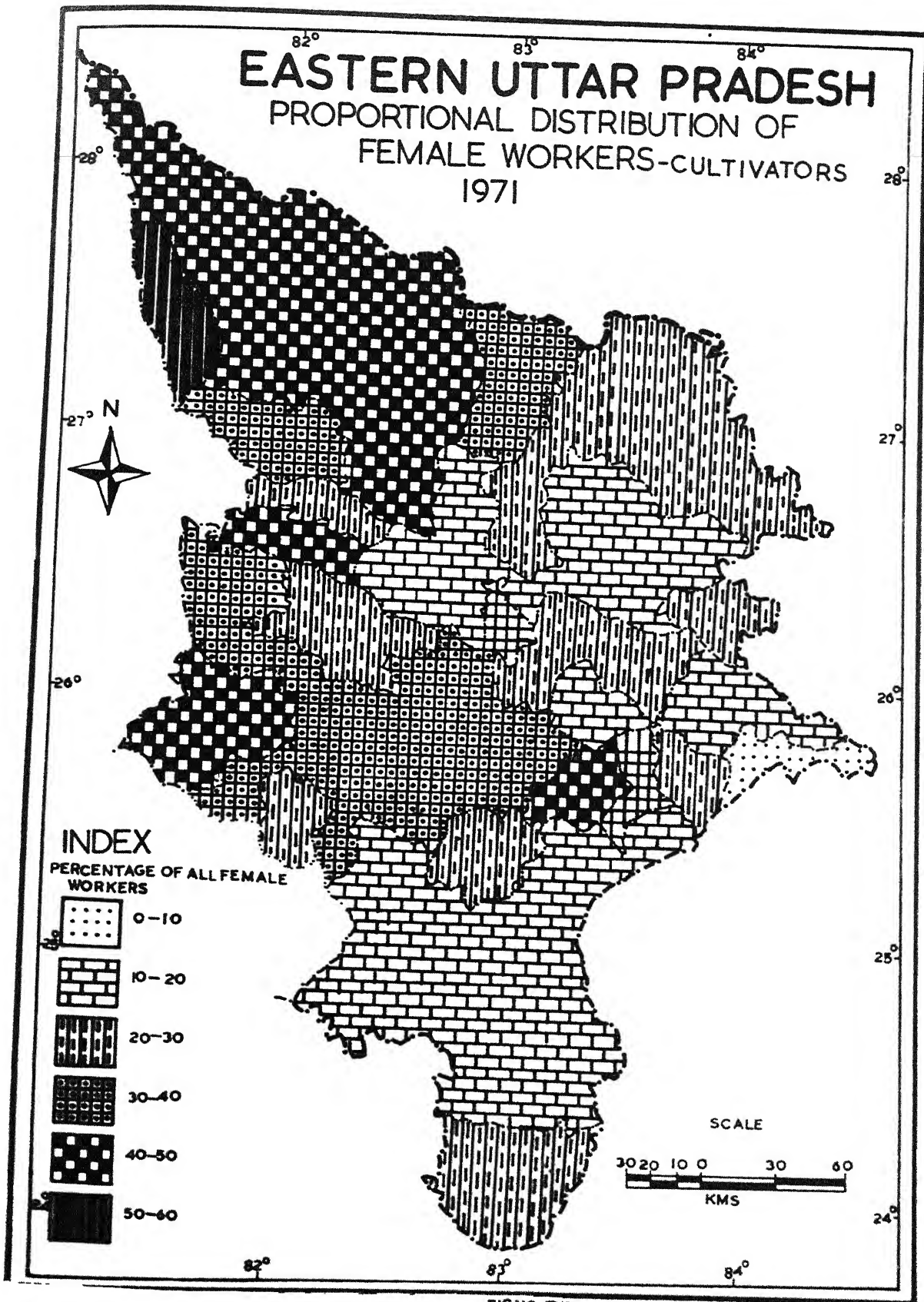
Second category (65.10 to 75.00 percent). There are 7 tahsils: Bahraich, Utraula, Gonda, Ribapur, Dommariyaganj, Harraiya and Bansi.

Third category (55.10 to 65.00 percent). There are 27 tahsils: Balrampur, Akbarpur, Musafirkhana, Kadipur, Kunda, Pratapgarh, Patti, Naugarh, Bansi, Khalilabad, Pharenda, Maharajganj, Hata, Padrauna, Deoria, Salempur, Saguri, Azamgarh, Phulpur, Lalganj, Shahganj, Machhalishahar, Jaunpur, Mariahu, Kerahat, Saidpur and Handia.

Fourth category (45% to 55 percent). There are 12 tahsils: Faizabad, Tanda, Amethi, Sultanpur, Ghosi, Rasra, Bansi, Ghazipur, Mohemadabad, Dudhi, Soraon and Phulpur.

Fifth category (35% to 45 percent). There are 10 tahsils: Gorakhpur, Bansgoan, Mohemmdabad, Ballia, Zamania, Gyanpur, Chandaul, Chakia, Chunar and Robertsganj.

Sixth category (25% to 35 percent). There are 2 tahsils: Mirzapur and Varanasi.



livelihood category of cultivation. All the tahsils lying in the Trans-Ghaghra sub-region are among such tahsils. The remaining tahsils maintained lower proportion than the average for this region. Thus it is seen that the proportion of workers is not distributed uniformly at the different administrative levels. It varies widely in the case of male workers but more strikingly in the case of female workers (Fig. 29) because the participation of female workers in the labour force was quite limited. If we look to the proportion of male and female workers separately, we find that the distributional pattern is still more meaningful. The maximum proportion of 85.3 percent for males and 58.30 percent for females was noted in the Tahsil of Kaiserganj of Bahraich District while Varanasi Tahsil recorded the lowest of 21.3 percent for former and Ballia Tahsil the lowest of 9.3 percent for latter. The proportion of males and females at the tahsil level indicates wider variation. However, as regards the proportion of both male and female workers engaged in cultivation separately, it is quite less pronounced among females than males but as regards the absolute number it is many more time pronounced among males than females.

The above discussion of persons, male workers and female workers at the tahsil level can be better understood in the form of frequency analysis and cumulative frequency. A glance at the frequency distribution and its cumulative frequency clearly points out the range of variation of proportion of persons, males and females engaged in cultivation at the tahsil level and it shows clearly the comparison and

contrast of distribution of the proportion.

Table VI-5

Frequency distribution in case of total persons at tahsil level engaged in cultivation in Eastern Uttar Pradesh, 1971.

Category of tahsils showing proportion	Frequency of tahsils	Cumulative frequency
I. 25 to 35 percent	2	2
II. 35 to 45 percent	10	12
III. 45 to 55 percent	12	24
IV. 55 to 65 percent	27	51
V. 65 to 75 percent	7	58
VI. 75 to 85 percent	3	61

Table VI-6

Frequency distribution in case of male workers at tahsil level engaged in cultivation in Eastern Uttar Pradesh, 1971

Category of tahsils showing proportion	Frequency of tahsils	Cumulative frequency
I. 25 to 35 percent	1	1
II. 35 to 45 percent	5	6
III. 45 to 55 percent	11	17
IV. 55 to 65 percent	23	40
V. 65 to 75 percent	14	54
VI. 75 to 85 percent	7	61

Table VI-7

Frequency distribution in case of female workers at the tahsil level engaged in cultivation in Eastern Uttar Pradesh, 1971

Category of tahsils showing proportion	Frequency of tahsils	Cumulative frequency
I. 0 to 10 percent	1	1
II. 10 to 20 percent	16	17
III. 20 to 30 percent	16	33
IV. 30 to 40 percent	17	50
V. 40 to 50 percent	10	60
VI. 50 to 60 percent	1	61

Economic activities associated with agriculture have been in predominant position since time immemorial. But the most unfortunate part of this is that a large proportion of workers although engaged in cultivation yet do not possess their non land but work in other's field and have always been classified as a separate livelihood class as agricultural labourer, so next to the cultivation in importance as source of gainful engagement is the livelihood class "agricultural labourer".

(b) Agricultural Labourers (Land less cultivators):

Historically, the emergence of a sizeable group deriving its livelihood mainly from casual labour on land is a relatively recent phenomenon in this region as well as in this country. There was perhaps no distinct class of agricultural labourers before the 19th century because the traditional rural community was organised into a balanced agricultural and handicraft economy. Land was not so scarce and the system of exchange of labour took care of additional requirement of labour on particular occasions. With the rapid increase in population, the pressure on available cultivable land became acute, leading to sub-division and fragmentation of holdings and further to the emergence of a class without land depending mainly on wages for livelihood. It had either a very small holding or had no land at all. Simultaneously the village crafts and cottage industries received a serious set back due to the imports of cheap manufactured articles in India. A large number of persons lost their traditional occupation and

they sought refuge in agriculture. They swelled the rank of agricultural labourers. Social stratification in village is linked with land and caste which govern status, economic power and political influence. Cultivators with large land holdings are at the apex. Agricultural labours drawn mostly from the economically and socially backward sections or poor class of persons like the scheduled castes and tribes form the second rank of cultivators, the necessary information regarding the number of agricultural labourers ^{is available} since 1901. But due to the changes in its definitions and classification in the successive censuses, the informations are not comparable.

The persons classified under this livelihood class come very much under the purview of cultivation. But they have been recorded and analysed separately on account of their indifferent relation with land in which they work. "A person who works in another's field or land for wages in cash, kind or share has been recorded in as an "agricultural labourer". Certainly he has no risk in cultivation because he works in other person's land merely for the sake of wages. He has no right of lease or contract on land on which he works. In 1951 census the agricultural labourers were put under two separate livelihood classes, although under the same agricultural class. But in 1961 and 1971 censuses they were put under a single livelihood class. In 1951 there were 1.79 million agricultural labourers accounting for 16 percent of the total working population of this region. This strength increased to 1.92 million in 1961 and 2.78 million in 1971 accounting for

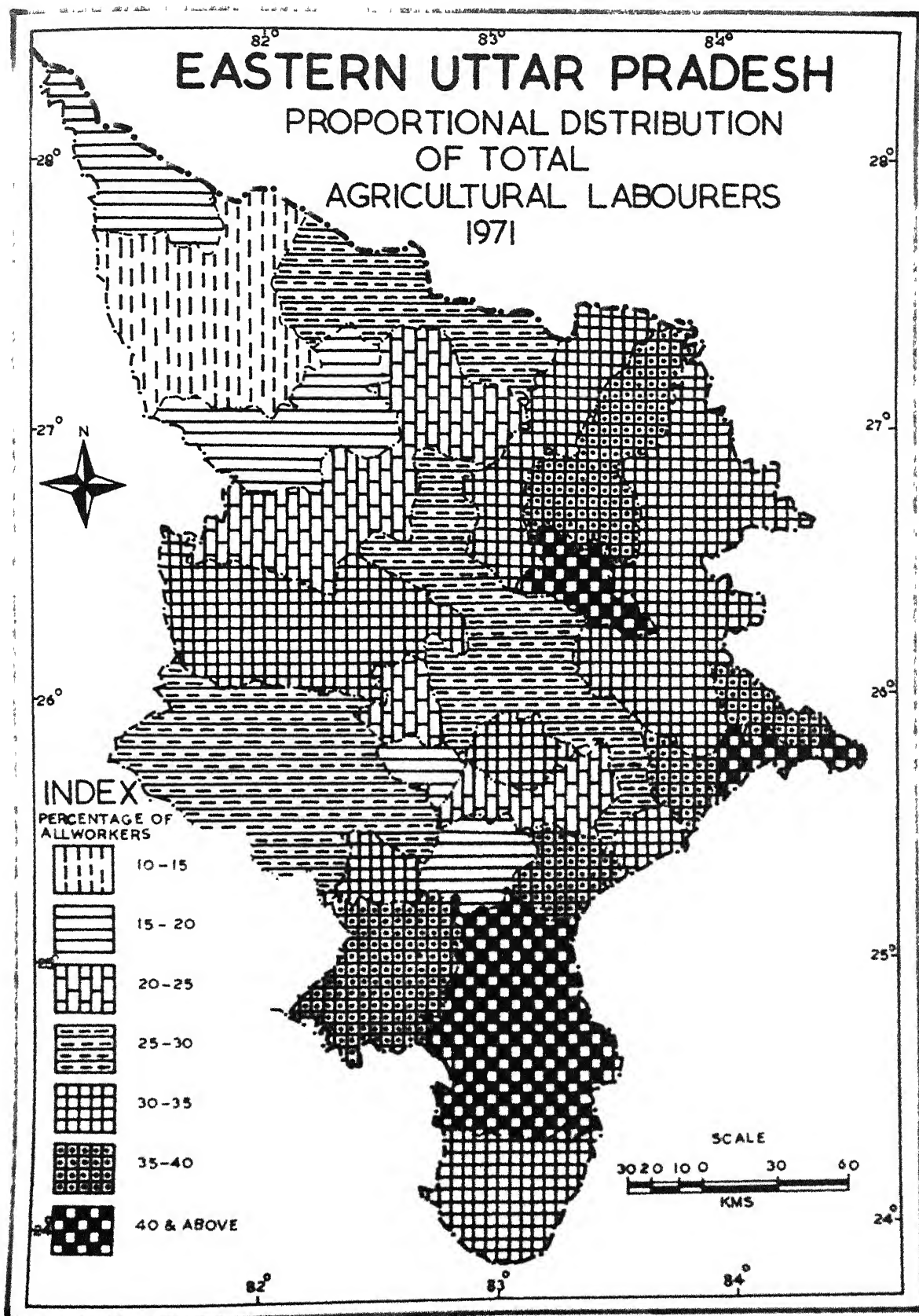
16.9 percent and 28.4 percent of the total workers in 1961 and 1971 respectively. Their proportion for these three censuses were 12.7 percent, 11.3 percent and 20.00 percent respectively for the whole of Uttar Pradesh. This situation is clearly indicative of the fact that there has always been higher proportion of agricultural labour in this region than in the rest of Uttar Pradesh. The economic condition of workers engaged in agriculture and its allied activities in this region can well be imagined due to the fact that as much as 28.4 percent of the total working population of this region worked in the land owned by others and it had no right on the land.

In 1971 there was a big shift of workers from cultivation to the class of agricultural labourers due to change of definitions and as a result of this, there was a fall in the proportion of cultivators and a quick rise in the proportion of agricultural labourers. The shift in the proportion of female workers from cultivators and agricultural labourers was even more striking.

At 1971 census, out of 2.78 million persons recorded as agricultural labourers in this region, 1.89 million were males and 0.89 million were females in this region. But the proportion for males and females separately it was 22.6 percent for the males and 63.1 percent for the females. These proportions were 17.2 percent and 44.5 percent respectively for the whole of Uttar Pradesh. This means that a higher proportion of males and a still higher proportion of females of Eastern Uttar Pradesh were engaged as agricultural labourers than in

case of this State as ^awhole. This shows that more than one fourth of the working population worked in the fields owned by others and it had no claim to the land which it cultivated and they were just wage earners. Undoubtedly a very high portion of female workers were engaged as agricultural labourers in this region and such workers mostly came from the backward and scheduled caste population which had little or no land in its name. However, if the absolute numbers of males and females engaged in this livelihood class were compared for all the Districts and Tahsils of this region, males outnumbered the females in a great way.

For males it varied from the maximum of 31.9 percent in Ballia to the minimum of 13.00 percent in Bahraich. In case of female workers the highest proportion was 77.00 percent in Mirzapur and lowest was 41.4 percent in Bahraich (Table VI-2). As source of gainful engagement for the population, the livelihood class of agricultural labour is second to cultivation in this region in all the Districts, except Mirzapur where it forms the largest single group. However, in case of female workers this class reigns supreme by engaging the maximum number and highest proportion of female workers in almost all the Districts of this region with only one exception of Bahraich District where the proportion of females engaged in agricultural labour was 41.4 percent which was lower than 49.8 percent engaged in cultivation (Table VI-3). The details of the distributional pattern of total, male and female workers engaged in the livelihood class of agricultural labour in proportion at the



tahsil level have been shown in Fig. 30, 31 and 32 respectively.

Out of sixty one tahsils of the region, fifty four tahsils maintained less number of workers in agricultural labour than cultivation, although the proportion varied widely from the maximum of 39.8 percent in Bansdih Tahsil to the minimum of 11.8 percent in Kaiserganj Tahsil. Seven Tahsils were noted for a different trend than the general trend witnessed in the majority of tahsils. These tahsils maintained more number of workers in the livelihood class of agricultural labour than cultivation. Tahsils namely, Gorakhpur, Bansgoan, Ballia, Zamania, Chakia, Robertsganj, and Mirzapur although lying in different sub-region, yet show higher proportion of workers engaged in agricultural labour than in cultivation. The proportion of workers engaged in agricultural labour was also dissimilar in all the seven tahsils, but the variation was of lesser magnitude. It varied from the maximum of 48.4 percent in Chakia Tahsil to the minimum of 36.6 percent in Gorakhpur Tahsil.

The proportion of male workers in cultivation had been much higher than that in agricultural labour. In 1971 in this region as a whole, 60.1 percent of the total male working population was recorded as cultivators as against 22.6 percent as agricultural labourers. Therefore, in case of male workers the proportion engaged in agricultural labour was less by 37.5 percent than that in cultivation, while in case of females it was about 36.00 percent higher than that in cultivation. The range of variation in case of male workers is not as much as

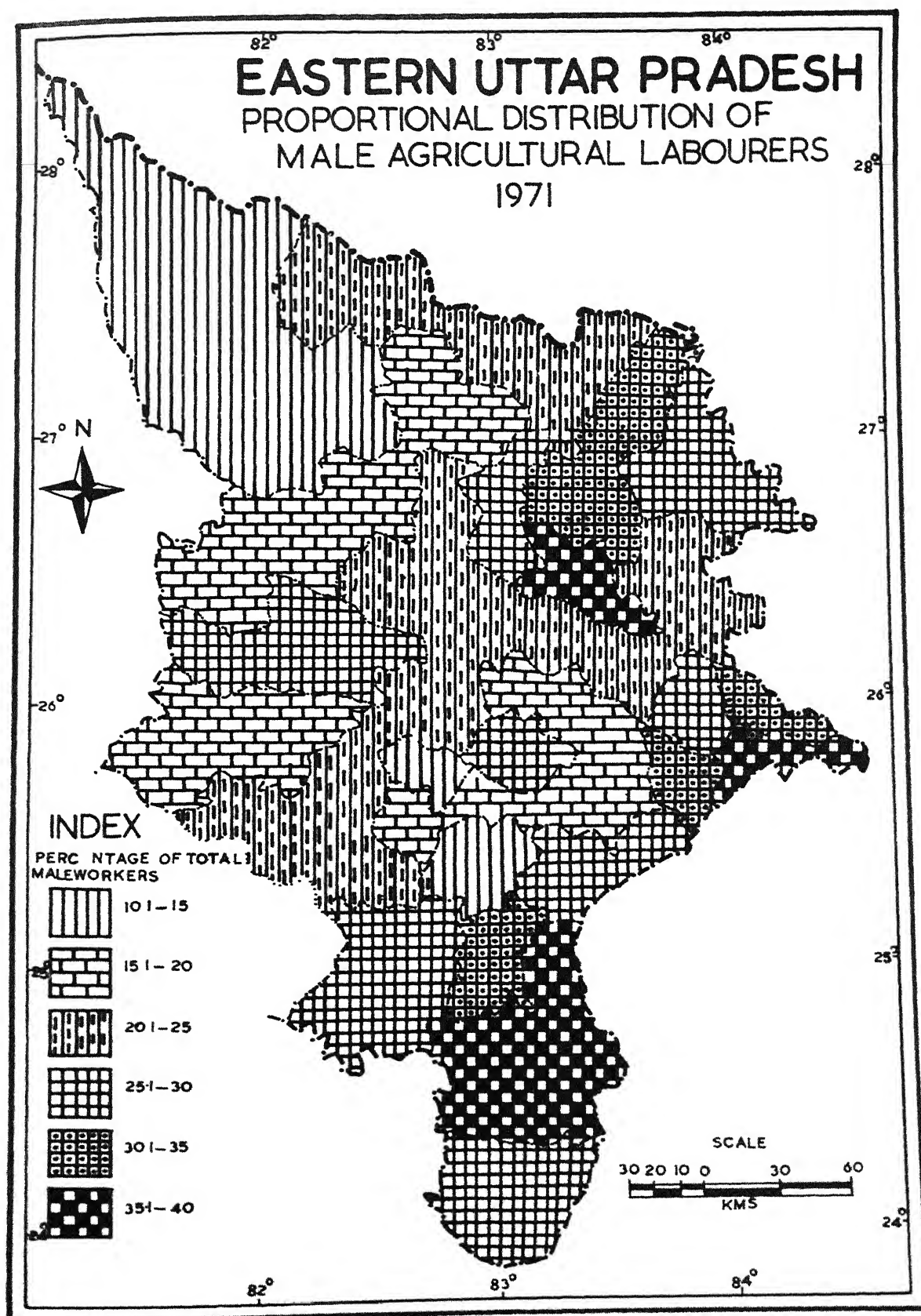


Table VI-8

Distribution of workers (in proportion) engaged in agricultural labour as livelihood class at the tahsil level in Eastern U.P.
1971

Name of the Tahsil, region, state	Proportion of workers engaged as labourers			Name of the Tahsil, region, state	Proportion of workers engaged as labourers		
	Total	Male	Fe- male		Total	Male	Fe- male
1. Nanyara	15.9	14.5	46.1	34. Ghosi	31.2	23.7	59.4
2. Kaiserganj	11.8	10.8	37.1	35. Azamgarh	25.1	19.7	63.5
3. Behraich	14.4	12.7	41.2	36. Mohemmadabad	25.0	18.9	50.0
4. Balrampur	26.9	22.7	53.7	37. Phulpur	28.0	22.5	60.3
5. Utraula	17.9	14.3	47.8	38. Lalganj	32.2	26.0	61.8
6. Gonda	13.6	11.9	37.8	39. Shahganj	24.9	20.7	59.8
7. Taraijanj	15.8	13.2	54.4	40. Machhalishahr	29.1	22.1	60.2
8. Faizabad	24.4	19.6	56.5	41. Jaunpur	17.6	13.9	47.9
9. Vikarpur	23.1	17.8	50.1	42. Mariahu	25.1	19.5	51.9
10. Akbarpur	30.9	24.6	72.6	43. Kerakat	23.2	18.9	50.9
11. Tanda	27.1	21.1	67.9	44. Rasra	33.5	27.8	75.2
12. Musafirkhana	30.1	19.4	62.5	45. Bansdih	39.8	32.1	78.3
13. Amethi	34.5	26.8	61.5	46. Ballia	40.8	35.1	75.7
14. Sultanpur	31.6	27.2	63.8	47. Saidpur	22.5	18.1	43.7
15. Kadiapur	31.1	26.0	70.3	48. Ghazipur	25.0	20.0	52.6
16. Kunda	25.7	19.9	48.4	49. Mohemmedabad	36.8	30.1	63.0
17. Pratapgarh	26.0	19.1	51.4	50. Zamania	40.8	27.4	68.2
18. Patti	26.3	20.0	56.4	51. Gyanpur	31.0	24.5	66.5
19. Domariaganj	22.7	18.5	50.4	52. Varanasi	15.4	12.2	41.8
20. Naugarh	27.7	21.7	60.8	53. Chandauli	35.8	29.1	76.1
21. Bansi	23.5	17.8	56.6	54. Chakia	48.4	39.8	83.2
22. Basti	27.4	20.6	76.1	55. Mirzapur	38.6	30.0	76.1
23. Khalilabad	31.5	25.2	67.1	56. Chunar	40.8	31.8	77.1
24. Harraiya	21.3	15.7	57.3	57. Robertsganj	47.3	36.1	80.0
25. Pharenda	30.5	24.3	68.9	58. Dudhi	33.9	26.2	70.4
26. Maharajganj	37.2	31.3	75.3	59. Soraon	30.8	23.3	59.4
27. Gorakhpur	3.6	30.3	74.8	60. Phulpur	29.8	23.8	59.2
28. Bansaon	46.6	37.5	80.3	61. Handia	26.6	20.6	49.4
29. Hata	30.6	26.1	69.2				
30. Padraura	34.1	28.9	72.3	E.U.P.	28.4	22.6	63.1
31. Deoria	31.2	24.1	77.2	U.P.	20.0	17.2	44.5
32. Salempur	30.1	23.1	72.9				
33. Sagari	26.6	20.4	67.6				

Source: Figures are calculated on the basis of data available
Census of India 1971, Series 21, Uttar Pradesh, Part II-A
General Population Tables, pp. 332-523.

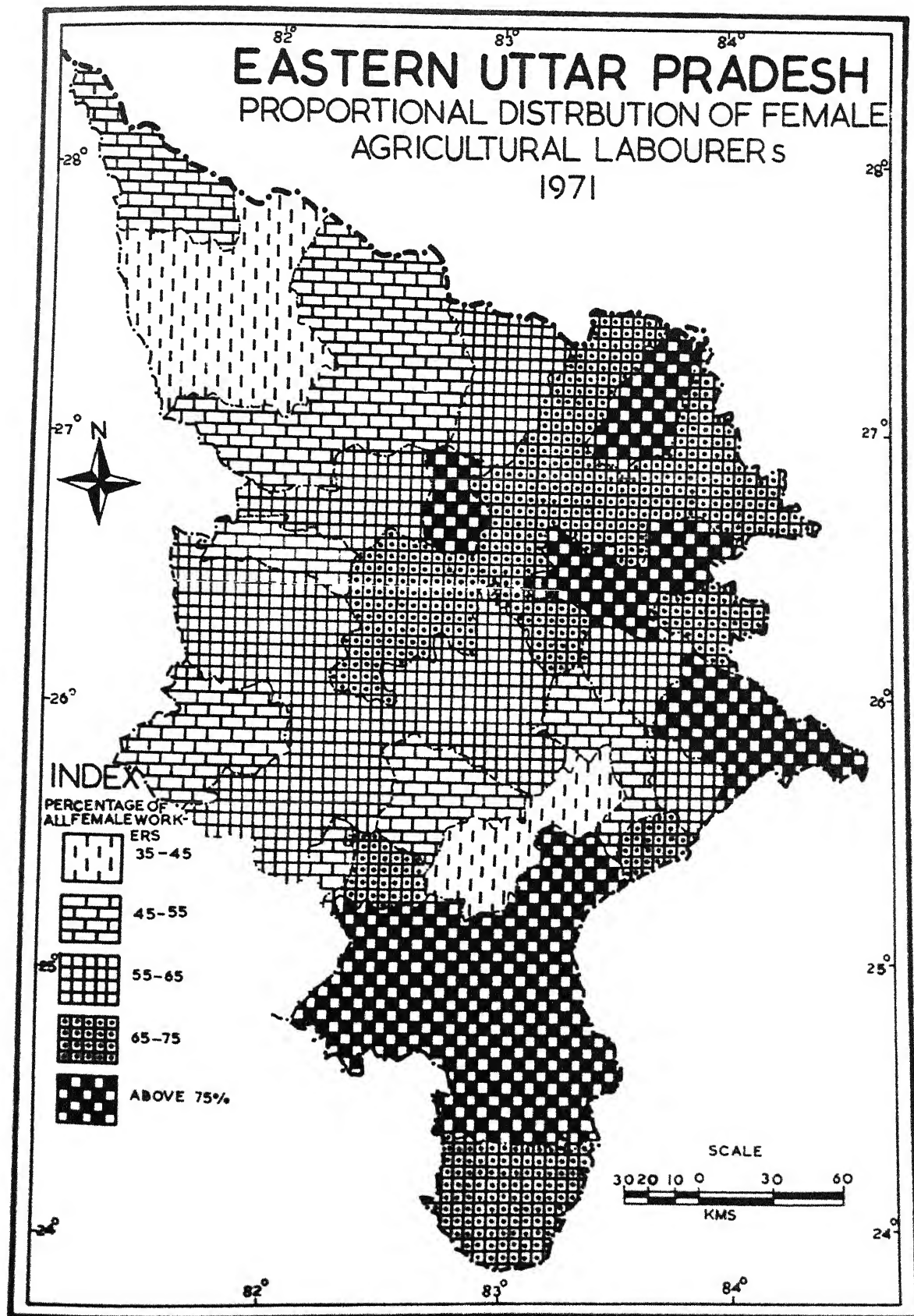
in the case of female workers at the tahsil level. As shown in the table VI-8, the proportion of male workers varied from the maximum of 39.8 percent in Chakia Tahsil of Varanasi which has large tract of rugged and forested land within its limits to the minimum of 10.8 percent in Kaiserganj Tahsil. In the case of female workers the highest proportion of 83.20 percent and also the lowest of 37.1 percent ^{are found} in the same tahsil again. Thus in the case of both male and female workers the maximum proportion engaged in agricultural labour was noted in Chakia Tahsil and the minimum in Kaiserganj Tahsil. In general in almost all the tahsils of this region the proportion of male workers engaged in this livelihood class is lower than in cultivation and for female workers it is higher in all the tahsils except in Kaiserganj, Bahraich and Gonda tahsils, where the proportion of females is lower in agriculture labour than in cultivation.

As regards the total workers engaged in agricultural labour as proportion of the total working population at the tahsil level, this region may be divided into four categories at the interval of 10.00 percent. The first category with 8 tahsils (six of which being in the Trans-Chaghra sub-region and the two in the Doab sub-region) recorded the proportion of workers under this livelihood class between 10 to 20 percent. The second category with largest number of tahsils i.e. 24 recorded the proportion between 20.1 to 30.0 percent. The third category with largest group of twenty three tahsils recorded the proportion between 30.10 to 40.00 percent and the fourth

category recorded the proportion between 40.10 to 50.00 percent and it covered only six tahsils namely Mansgoan, Ballia, Zamania, Chakia, Chunar and Robertganj (Fig. 30).

In case of male workers engaged in agricultural labour, their proportion to the total working males at the tahsil level has been divided into six categories at the interval of 5.00 percent. These categories have been shown in the Fig. 31. The first category has proportions between 10 to 15 percent covering eight tahsils, out of which six are in the Trans-Ghaghra sub-region and two (Varanasi and Jaunpur) in the Doab sub-region. The second category with 15 tahsils recorded the proportion between 15 to 20 percent and the third category with 17 tahsils between 20 to 25 percent. Twelve tahsils forming the fourth category had proportions between 25 to 30 percent; five tahsils came under the fifth category having proportions between 30 to 35 percent and the remaining four tahsils formed the sixth category with proportions between 35 to 40 percent of male workers engaged in agricultural labour.

Although in absolute number males outnumbered females in a big way in all the tahsils of this region, but as regards the proportion of females engaged in agriculture labour to the total female working population of each tahsil, it was found higher than males because of the fact that a major portion of the female workers was engaged in agricultural labour. Except Kaiserganj, all the tahsils recorded more than 40 percent of their female working population under agricultural labour. This shows that although a very small proportion of the female



population participates in the working force, yet their major part is engaged in agricultural labour. The range of variation in proportion of female workers is quite large. It varied from the lowest being 37.1 percent to the highest being 83.2 percent. All the tahsils in this case have been categorised into five classes of proportions at the interval of 10 percent. Under the first category came five tahsils namely, Bahraich, Kaiserganj, Gonda, Varanasi and Saidpur which recorded proportions between 35 to 45 percent. The second category having 14 tahsils had proportions between 45 to 55 percent and the third category ~~with~~ 17 tahsils ^{had} between 55 to 65 percent. The fourth category with 13 tahsils recorded proportions from 65 to 75 percent and the remaining twelve tahsils had proportions above 75 percent of the female workers classified as agricultural labourers.

The above discussion regarding the total persons, male workers and female workers engaged in this livelihood class at the tahsil level may be explained still better by means of the frequency analysis and graphical presentation (using Histograms, Frequency Polygons and Cumulative Frequency Graphs), However, graphical representation has not been made.

The table VI-2 showing frequency analyses brings home the comparisons and contrasts prevailing in the proportion of persons, male workers and female workers engaged in the livelihood class of agricultural labour in this region.

Table VI-9

Frequency distribution of workers at tahsil level engaged as agricultural labourers, 1971.

Category of tahsils showing proportion	Frequency of tahsils	Cumulative frequency
<u>Total workers</u>		
I. 10 to 20 percent	8	8
II. 20 to 30 percent	24	32
III. 30 to 40 percent	23	55
IV. 40 to 50 percent	6	61
<u>Male workers</u>		
I. 10 to 15 percent	8	8
II. 15 to 20 percent	15	23
III. 20 to 25 percent	17	40
IV. 25 to 30 percent	12	52
V. 30 to 35 percent	5	57
VI. 35 to 40 percent	4	61
<u>Female workers</u>		
I. 35 to 45 percent	5	5
II. 45 to 55 percent	14	19
III. 55 to 65 percent	17	36
IV. 65 to 75 percent	13	49
V. 75 to 85 percent	12	61

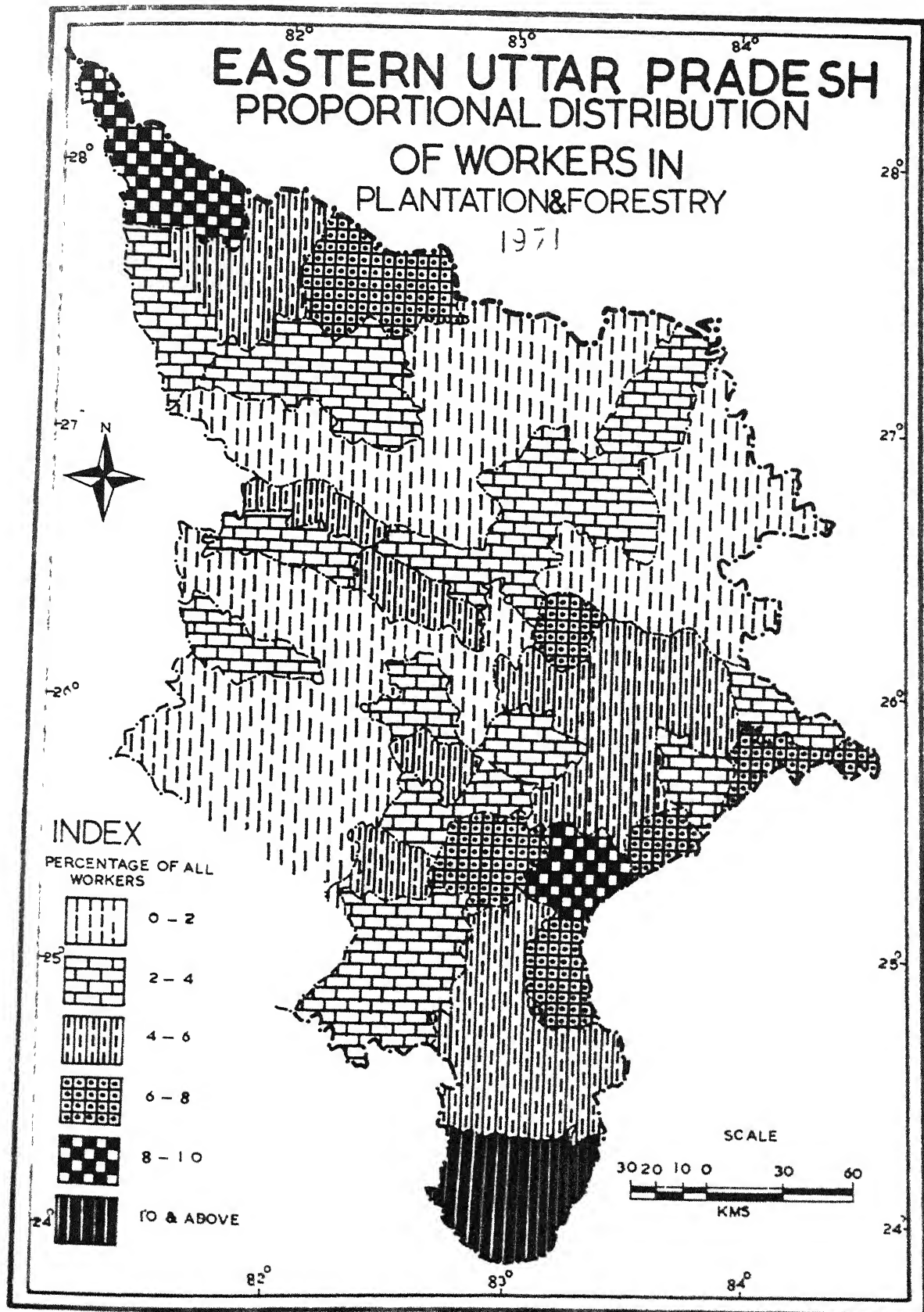
(c) Workers engaged in plantation, orchards and other allied activities like Livestock, Forestry, Hunting and Fishing etc.:

The workers engaged gainfully in plantations, orchards and other allied activities have not been treated as cultivators or agricultural labourers, but as 'other workers' under the census of 1971, although these activities are very much part and parcel of agriculture. For the first time at 1961 census, all such workers along with the workers engaged in almost similar activities such as livestock raising, forestry, hunting and fishing were put under a separate livelihood class. Among

the livelihood classes under primary sector as regards the numerical strength of workers and the potential source of gainful engagement of the people living in this region, this livelihood class holds third place and hence needs a separate analysis.

This livelihood class in fact includes numerous major and minor groups which may need separate treatment. But the numerical strength of persons engaged in this class forms such a nominal proportion to the total working population at the regional, sub-regional, District or tahsil level that all the groups have been treated together under one livelihood class which consists of the following major groups of industrial activities: (i) Plantation, orcharding and other allied activities; (ii) Forestry and logging; (iii) Livestock raising and hunting; and (iv) Fishing.

The data of 1961 census in this regard are not comparable with those of 1971 census, because persons engaged in 'mining and quarrying' were also put in this category in 1961. According to 1971 census there were in all 38,381 persons engaged in this livelihood class, out of which 33,563 were males and 4,818 females and thus males constituted 88.2 percent and females 11.8 percent of these workers. Therefore, on an average there were 8 male workers as against every female worker engaged in this industrial category. It is now worthwhile to analyse the composition of these workers divided by sex and age groups at the District level in this region because the contributions made by the persons of the other age groups



FIGNO 33

than the effective age group in this respect is quite significant. ~~Their~~ contribution, however, varied widely from one District to another. Hence the reasons for such variation of the proportion of workers engaged in this livelihood class which is almost as much rural in composition as the cultivation and agricultural labour classes, should also be analysed.

The proportion of workers engaged in this livelihood class to the total working population of this region constituted only 0.4 percent as against such figure 0.6 percent for the whole of Uttar Pradesh. These figures clearly indicate that the proportion of workers engaged in this region was lower than the state average and hence the activities under this livelihood class have not developed in this region even upto the average of this State. Thus a portion of workers could be diverted towards the development of these activities in order to relieve the pressure of workers on the other two livelihood categories already discussed in the chapter. As regards the proportion of workers to the total working population at the District level in this region under this category, the variations ranged from the maximum of 0.8 percent in Varanasi to the minimum of 0.1 percent in Pratapgarh.

Some more important aspects are brought to light if we analyse the composition of workers based on sex and age groups. The participation of females (11.8 percent) in this livelihood class is more pronounced in this region than the State of Uttar Pradesh (7.7 percent) as a whole. The female participation, however, varied widely from one District to another. The

Table VI-10

The proportion of workers engaged in the third livelihood category of the primary sector divided by sex and age groups in the districts of Eastern U.P., 1971.

Name of the District or Region	Numerical strength of workers				Percentage analysis		Percentage of the age groups		
	Persons	Males	Females		Males	Females	0-14 yrs	15-59 yrs	60 and above yrs
1. Bahraich	2947	2686	261		91.1	8.9	21.8	74.8	3.4
2. Gonda	3314	3185	129		96.1	3.9	19.6	75.7	4.7
3. Faizabad	2654	2387	267		89.9	10.1	20.9	73.5	5.6
4. Sultanpur	1051	898	153		83.5	14.5	30.9	60.0	9.1
5. Pratapgarh	379	322	57		85.0	15.0	23.5	69.6	7.9
6. Basti	1919	1745	174		90.9	9.1	15.4	79.1	5.5
7. Gorakhpur	3790	3328	462		87.8	12.2	10.3	83.7	6.4
8. Deoria	1721	1599	122		92.9	7.1	13.6	80.5	5.9
9. Azamgarh	3673	2945	728		80.2	19.8	14.8	75.00	10.2
10. Jaunpur	1693	1556	137		91.9	8.1	9.7	84.6	5.7
11. Ballia	2707	2457	250		90.8	9.2	12.6	80.8	6.6
12. Ghazipur	2632	2146	486		91.5	18.5	13.3	79.2	7.5
13. Varanasi	6368	5453	915		85.6	14.4	7.1	84.1	8.8
14. Mirzapur	3036	2724	312		99.7	10.3	32.5	61.5	6.2
15. Allahabad	497	432	65		86.9	13.1	10.5	79.4	10.1
Eastern U.P.	38381	33563	4518		88.2	11.8	15.8	77.4	6.8
U.P.	167575	154706	12869		92.3	7.7	12.1	79.7	8.2

highest participation rate of 19.8 percent was in Azamgarh District while the lowest 3.9 percent was in Gonda District. However, male workers numerically out number female workers in this livelihood class also.

As regards the age groups in this region as a whole, children constituted 15.8 percent, the effective population 77.4 percent and the old and retired persons 6.8 percent of the total working population in this category as compared to 12.1 percent, 79.7 percent and 8.2 percent respectively for the whole of Uttar Pradesh. The comparison indicates that the age group 0-14 years contributed more while the other two age-groups contributed less than the State's average. Such a composition speaks of the fact that in this region as compared to this state children are denied more of their privilege of being educated and nourished properly and under greater economic strain they are forced to join the labour force also in their early age.

The age group 0-14 years i.e. children contributed the maximum of 32.5 percent in Mirzapur District and to the minimum of 7.1 percent in Varanasi District, while the age group 60 years and above recorded the highest proportion of 10.2 percent in Azamgarh District and the lowest proportion of 3.4 percent in Bahraich District. The proportion of workers in the age group 15-59 years, varied from the maximum of 84.6 percent in Jaunpur District to the minimum of 60.00 percent in Sultanpur District.

The extent of variation of the proportion of total workers and of their male and female groups and of their

composition by age groups at the District level, leads us to study the distribution of proportion of workers engaged in this livelihood class at the tahsil level.

The persons engaged in this industrial category, although form a small numerical proportion of the total working population of this region, yet their distribution shows considerable amount of variation at the tahsil level. It varied from the maximum of 1.2 percent in Dudhi tahsil of Mirzapur District to the minimum of 0.07 percent in Soraon Tahsil of Allahabad District. Thus, there existed nearly 17 times variation between the highest and the lowest proportions. All the tahsils in this respect are grouped under six categories at an interval of 0.2 percent as depicted in Fig. 33.

Out of sixty one tahsils, twenty four recorded the percentage from 0.07 to 0.20; fifteen from 0.21 to 0.40; thirteen from 0.41 to 0.60; six from 0.61 to 0.80; two from 0.81 to 1.00; and one between 1.01 to 1.20 of the working population engaged in this livelihood class.

A further analysis of the proportional distribution of workers gainfully engaged in this industrial category is done on ^{the} basis of sex. In this region and also in its Districts and in almost all of its tahsils the male workers out number the female workers to such an extent that the former constituted as much as 98.9 percent in Chakia Tahsil and latter 32.5 percent in Sagari Tahsil. There exists a considerable degree of variation in the proportion of both male and female workers at

the tahsil level. Besides Sagari among other tahsils, where the female workers engaged in this livelihood class constituting more than 30.00 percent of the proportion are Zamania with 30.7 percent and Bansgoan with 30.5 percent. As regards the strength of workers in absolute numbers, the maximum strength of 3,155 persons was recorded in Varanasi Tahsil followed by Chandauli (1,803 persons), Balrampur (1,675 persons), Nanpara (1,658 persons), Ballia (1,363 persons); and Bahraich 1,175 persons, all above, 1,000 persons. It is interesting to note that the tahsils recording more absolute number of workers (except Varanasi and Ballia) belong either to the Trans-Chaghra or to the Southern upland sub-region. The tahsil wise further details are as follows: Bansgaon 913, Gyanpur 965, Robertsganj 897 and Dudhi 858 persons.

(d) Distribution of workers engaged in Mining and Quarrying:

The livelihood class under 'Mining and Quarrying' is also important because the minerals and the industries based on them have played a significant role in the growth and development of ~~en~~ culture and civilisation. However, Eastern Uttar Pradesh has very limited resources of minerals and so the persons engaged in mining and quarrying form a negligible proportion of the total working population of this region. Mining includes certain coactivities also in addition to mining of coal and other minerals. Quarrying includes extraction of stone, clay, sand, gravel, limestone and other non-metallic products such as precious and semi-precious stones etc.

The persons engaged in Mining and Quarrying in 1971 in this region were 3,374 only. Out of this 3,118 were males and 356 were females. Thus the male workers accounted for 89.75 percent and the female workers 10.25 percent. The workers of the effective age group constituted 92.4 percent, children below 14 years 4.3 percent and the old and retired persons 3.3 percent of the total workers engaged in this class. In comparison to other industrial categories, in this livelihood class the contribution made by the persons of other than the effective age group has not been so pronounced as it engaged only 7.8 percent of the workers in this class. The distribution of workers in this class is also quite unique as compared to those already mentioned, due to the fact that these resources are found in very limited areas only.

Table VI-11

Distribution of Workers engaged in Mining and Quarrying in Eastern Uttar Pradesh, 1971

Name of the District/ Region	Absolute number of persons engaged			Percentage of the total workers of this class in E.U.P.
	Total	Male	Female	
1. Bahraich	14	13	1	0.4
2. Gonda	127	125	2	3.8
3. Faizabad	75	74	1	2.2
4. Sultanpur	24	22	2	0.7
5. Pratapgarh	64	63	1	1.8
6. Basti	108	97	11	3.3
7. Gorakhpur	248	211	37	7.3
8. Deoria	226	223	3	6.7
9. Azamgarh	404	375	29	12.0
10. Jaunpur	184	168	16	5.2
11. Ballia	204	198	6	6.0
12. Ghazipur	168	152	16	4.8
13. Varanasi	402	390	12	12.0
14. Mirzapur	1010	805	205	30.0
15. Allahabad	111	97	14	3.8
E.U.P.	3374	3318	356	100.0

Source: Census of India 1971, Series 21, Uttar Pradesh

It is evident from the table VI-11 that the District of Mirzapur with its 30 percent proportion of the region leads the list followed by Azamgarh and Varanasi Districts with 12.00 percent of proportion in each case. Among other notable Districts are Gorakhpur (7.3 percent), Deoria (6.7 percent) and Ballia (6.00 percent). For remaining District the proportion varied from 5.20 percent (Jaunpur) ^{to} 0.4 percent (Bahraich). At the tahsil level even more significant characteristics of the distribution of workers engaged in this livelihood class are brought to light. The tahsil of Chunar in Mirzapur District is known for its clay work throughout this country which leads the list with 373 persons engaged in this industrial category in that tahsil followed by the tahsils of Robertsganj (339 persons) and Varanasi (221 persons). Among the other tahsils which are important for the activities connected with mining and quarrying are Mirzapur (157 persons), Dudhi (141 persons), Gorakhpur (139 persons), Chandauli (103 persons) and Azamgarh (102 persons). The distributional pattern of workers engaged in this class indicates a concentration of workers in few tahsils only where minerals are extracted.

6.3. Distribution of workers in the primary sector of activities in the urban centres of Eastern Uttar Pradesh:

A reference of the distribution of workers engaged at each urban centre in the primary sector in this region is also significant because 'a town or city, has its special role to play in the development of population because it forms an intermediary unit between the swollen villages with minor urban

characteristics and the surrounding rural population'. The swollen villages in particular and other ~~villages~~ situated close to urban centres in general combine the traits of rural-cu-urban complex. This has been further elucidated that "it is a political organ, a focus of contacts, a nodal point as it has been called. "It is an expression of different phenomena from those expressed by the villages".¹ An urban centre or a service centre exists because essential services rendered to the surrounding areas. Thus there are cities of varying sizes ranging from "small hamlets performing the simple functions such as providing a limited shopping and market centre for a small contiguous area upto a large city with a large tributary area composed of service areas of many smaller towns and providing more complex services such as whole saling, large scale banking, specialised retailing and the like".² Hence urban functions are different from those done by villages. However, some activities of the primary sector are also performed by the urban centres but only very limited in nature and quantity.

An urban centre has its significance for the area or the region in which it is located because of its special functions and services extended to the people living inside and outside its tributary areas. The services performed by it are varied and complex in nature. They differ significantly from one centre to another. Although the urban centres specialise in non-agricultural functions, even then many of the urban centres of this region indicate the predominance of workers engaged in different economic activities of the primary

sector, which has big agricultural orientation. However, their proportion to the total working population shows extensive variation from one centre to another.

About 7.06 percent of the total population of this region living in urban centres denotes the minimum urban functions. But more significant is the fact that about 28.2 percent of the total urban population of this region was recorded as workers in 1971. Of the total urban working population of this region only 11.5 percent was engaged in the activities of the primary sector as compared to 10.6 percent of Uttar Pradesh as a whole. Although in absolute numbers the males outnumbered females in a big way in the urban areas than in the rural areas of this region in the primary sector, yet in proportion to their respective labour forces in the region it was 11.1 percent for males and 11.7 percent for females. The composition of workers by sex and their respective proportion vary widely from one centre to another. The economic activities of the primary sector are although performed mainly by the rural populace, yet they carry much significance as sources of gainful engagement in many of the urban centres of the region also. As many as twenty of the urban centres of this region had more than one-fourth of their labour force engaged in the activities of the primary sector in 1971 (Fig. 34). Reoti (Ballia District) with 76.5 percent of its workers engaged in the activities of the primary sector lead the list of such urban centres, followed by Markundi with 72.3%, Bansi Khas with 48.1%, Kachhwa with 43.1%, Ahraura with 38.9%, Dudhi with 38.2%,

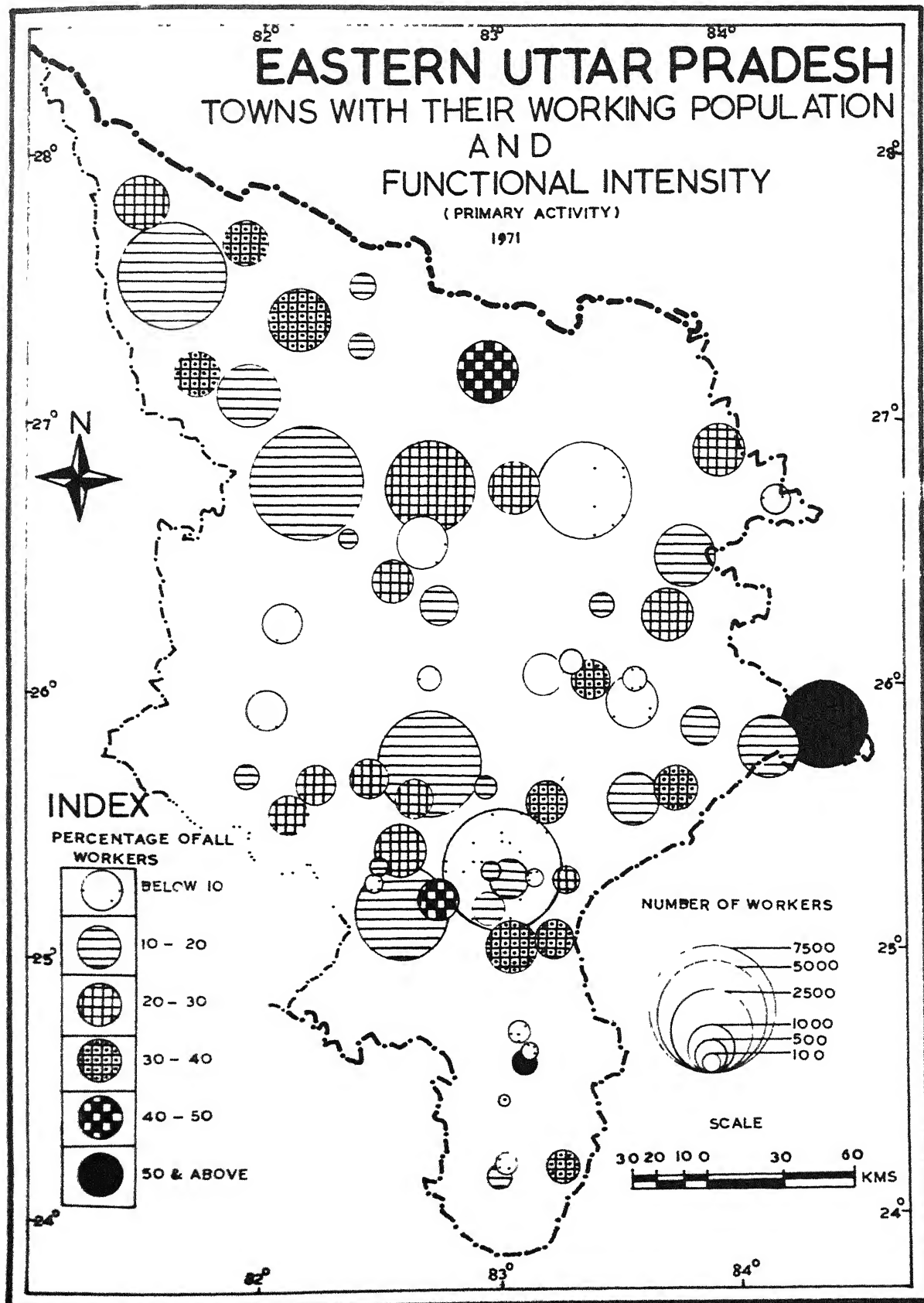


FIG.NO. 34

Mohemmadabad with 35.6 percent and Saidpur with 34.7 percent. All such centres having more than one-third of their labour force engaged in the primary sector are small urban centres and they have mostly local importance. On the contrary, there are as many as eight urban centres in this region which had less than 5 percent of their working population engaged in the primary sector. Maruadih presented a particular type with only one worker in the primary sector. In the ascending order from the bottom the other centres in this respect are Chopan (0.7 percent), Obra (1.14 percent), Moghalsarai (1.5 percent), Siwarhi (2.3 percent), Renukoot (2.6 percent), Varanasi (4.2 percent) and Gorakhpur (4.6 percent). Thus the two extremes are shown by Reoti (the highest) and Maruadih (the lowest).

Among the occupations of the primary sector, the functional group under cultivation had 11.5 percent of the workers engaged in it followed by the agricultural labour with 5.3 percent. The third group engaged 0.6 percent of workers only as compared to 5.5 percent, 4.2 percent and 0.8 percent under these categories respectively for the state of Uttar Pradesh.

Among the workers of the primary sector, the cultivators form the largest group in the urban centres of the region. Among the different urban centres of this region the proportion of this functional group varied from the maximum of 29.5 percent in Bansi Khas to the minimum of nearly nil in Maruadih and Renukoot which are known throughout this country for their establishments.

Agricultural labourers again hold the position of the second largest functional group among the workers of the primary sector in the urban areas of this region. The variation of the proportion of agricultural labour among the urban centres of this region is quite erratic in nature. Reoti records 52.1 percent and Makundi 49.3 percent of the proportion and then it falls to 22.1 percent for Kachhwa.

According to 1971 census there were 3,782 persons engaged in the third industrial category of the primary sector, constituting only 0.6 percent of the total urban labour force of this region. Out of which there were 3,457 males and 325 females and thus the former constituted 91.4 percent and the latter 8.6 percent of the labour force.

The proportion of such workers (third industrial category) varied from the maximum of 7.0 percent for Jaunpur to the minimum of one worker only in Maruadih and Barhanganj. There are five urban centres namely, Markundi, Chopan, Lohta, Mohammadabad (Azamgarh) and Jalalpur which have no worker under this industrial category.

Mining and quarrying engage a negligible proportion of the total urban labour force in this region. There were 544 persons engaged in these activities in 1971 in this region, out of which males were 528 and females were 16 only. They were distributed into thirty two urban centres. The remaining thirty four urban centres had no workers engaged in this occupation. The males constituted 97.0 percent and the females about 3.0 percent of the labour force. The maximum number of

workers of this occupational group were engaged in Balrampur (87) followed by Azamgarh (76), Varanasi (75), Faizabad and Maunath Bhanjan (38 each), Deoria (36), Utraula (30), Jaunpur (25), and Mirzapur and Kachhwa (24 each).

From the above discussion it is quite clear that these occupations are rural in nature and therefore, their proportion in urban centres is less pronounced except in some of the urban centres of this region. As the urban centres grow in size, their urban functions multiply and the workers shift from the agricultural activities towards the non-agricultural activities. Some of the urban centres of this region grew due to the establishment of certain industrial complex and so they had quite less proportion of workers engaged in the activities of the primary sector.

REFERENCES

1. Blasche, Videl de la. Principles of Human Geography, Reprinted Edn., 1951, p. 115.
2. Mayer, H.M. and Kohn, C.F. Readings in Urban Geography. Joint Indo-American Edition, 1967; 'A theory of location for cities', pp. 203-4.

CHAPTER VII

DISTRIBUTION OF WORKING POPULATION GAINFULLY
ENGAGED IN OCCUPATIONS OR ECONOMIC ACTIVITIES OF
SECONDARY OR INDUSTRIAL SECTOR

CHAPTER VIIDISTRIBUTION OF WORKING POPULATION GAINFULLY ENGAGED IN
OCCUPATIONS OR ECONOMIC ACTIVITIES OF THE SECONDARY OR
INDUSTRIAL SECTOR7.1. General:

In a region like Eastern Uttar Pradesh which is predominantly agricultural in character because its 84.1 percent of the working population is gainfully engaged in the agriculture and allied activities i.e. primary sector, the development of Secondary or Industrial Sector has lagged behind as only 6.5 percent of the total workers of this region were engaged in the different occupations of this sector. This small proportion of the working population engaged in this sector speaks itself of the industrial backwardness of this region. During the recent decades efforts have been made to develop this region industrially so as to strengthen its economic structure and this step has certainly brought some fruitful results. An 'industry' is a wide term. It includes the large-scale, small-scale and cottage and village industries. But in fact the industries do not strictly fall into any watertight definition. There are conglomerations of industries with varying levels of investment, technology, scale of production and forms of organisations. Such terms as 'small scale industries', 'handicrafts' and 'village industries' or 'cottage industries' are used loosely which to some extent convey the contents and scales of these industries. By and large those terms are used to distinguish such industries from the large scale industries

which are characterised by the utilisation of large quantities of resources, large production of goods, large investment of capital and intensive use of technologies. The small scale and cottage industries utilise small quantities of resources, carry on production on a small scale and they are largely labour intensive.

It may be pointed out here that all workers of the secondary sector had been classified differently at the previous censuses* and they were put under different livelihood classes also.

According to 1971 census which classified the working population by the main activity, the workers engaged in occupations under the industrial sector were classified into the following two main occupational groups:

At 1951 census: All the workers of this sector were put in the fifth occupational group under non-agricultural classes and this functional group was named as "Production" other than cultivation.

At 1961 census: All such workers gainfully employed or engaged in the economic activities of industrial sector were classified into three independent functional groups at fourth, fifth and sixth places under the following heads:

- (IV) Workers at Household Industry;
- (V) Workers in manufacturing other than Household Industry;
and
- (VI) Workers in the activities of construction.

At 1971 census also like 1961 a nine fold classification of working population was presented but with a minor difference that the workers engaged in mining and quarrying were treated under an independent occupational group and such workers were accounted for in the fourth livelihood class, while the workers engaged in manufacturing, processing, servicing and repairs were put together under one category i.e. V category of livelihood class, sub-divided into Va and Vb. The workers engaged in the construction were treated in the VI livelihood category. Thus the workers of secondary occupation were categorised into two main livelihood classes as follows:

- (V) Working in manufacturing, processing, servicing and repairs.
- (VI) Working in construction.

- (i) Workers engaged in manufacturing, processing, servicing and repairs were classed under one group which was further divided into two sub-functional groups as below:
 - (a) Workers engaged in Household Industry; and
 - (b) Workers engaged in other than Household Industry; and
- (ii) Workers engaged in constructional activities.

The above occupational groups of workers are categorised as Va, Vb and VI in the Census Reports of 1971. The sixth functional group consists of the workers engaged in construction and maintenance of buildings, roads, railways, telegraph and telephone lines, water ways and water reservoirs etc. The definitional change of a 'worker' from one census to another brought much variations in their strength engaged in this sector. Some livelihood categories interchanged quite frequently. This made the comparison of figures very difficult.

7.2. Workers engaged in the Industrial or Secondary Sector:

At 1951 census 5.84 lakh persons were recorded engaged in the occupations of the secondary sector and they constituted 5.2 percent of the total working population of this region. The number of such workers rose to 8.98 lakh at 1961 census and it fell down to 6.35 lakh at 1971 census. In proportion to the total working population it rose to 7.9 percent at 1961 census and declined to 6.5 percent at 1971 census. These proportions of workers engaged in the economic activities of the secondary sector at 1951, 1961 and 1971 censuses may be compared against 7.7%, 9.7% and 7.9% respectively for the State of Uttar Pradesh and 10.7%, 12.2% and 11.2% respectively for this

country as a whole. This indicates a very much backward industrial economy of Eastern U.P. because the above figures for this region rank lower than those of this state and much lower than those of this country. As regards the variation of proportion of workers of this sector, this region also followed the same trend as that of this state and this country.

If the break up of the proportion of workers by occupations of the secondary sector is analysed, it may be found that there was a fall from 6.1 percent in 1961 to 4.1 percent in 1971 in the case of the workers engaged in the household industries and there was a rise from 1.4 percent in 1961 to 2.1 percent in 1971 in the case of the workers engaged in manufacturing activities other than the household industry. This trend is indicative of the fact of backwardness of the indigenous industries but it shows some progress in the field of manufacturing activities other than the household industry during the post independence period. However, this tempo of industrialisation has not made any significant dent on the occupational structure of this region. On the other hand a tremendous set back was caused to the household industries as the number of workers engaged in them declined from 6.95 lakh in 1961 to 3.99 lakh in 1971 in the region. A large fall in the number of workers engaged in the secondary sector was partly due to the decline of the indigenous industries and partly due to the strict definition of the term 'worker' adopted at 1971 census.

Occupational distribution of working population under the secondary sector and its variation during the post independence period in Eastern Uttar Pradesh,

Source: Figures are calculated from and are based on:

(i) Census of India 1951, Part I, Economic and Social Statistics, pp. 53-55.
(ii) Census of India 1961, Paper No. 1961, Ed. 1961, pp. 53-55.

(ii) Census of India 1961, Paper No. 1004, Pt. I, pp. 39-53.
(iii) Census of India 1971, Series 21, Uttar Pradesh, Part II, General Population Tables, pp. 316-23.

(iv) District Census Handbooks of 1951, 1961 and 1971. pp. 316-23.

The table VII-1 clearly shows that at 1961 census an increase by 2.7 percent over the figures of 1951 census was recorded in the case of the workers gainfully engaged in the different categories of occupations of the secondary sector in Eastern Uttar Pradesh. Although all the Districts of the region also show the positive variation with no exception yet the magnitude of variation differed widely from the maximum of 4.8 percent in the District of Varanasi to the minimum of 0.9 percent in Ghazipur District.

At 1971 census situations changed altogether and a tremendous decline in the number of workers engaged in the industrial sector of the region was noted. Thus the negative variation became the feature in respect of the workers of this sector. The proportion of such workers to the total working population of the region in 1971 was 1.4 percent below the figures of 1961, although this was lower than 1.8 percent for U.P. and higher than 1.0 percent for the country. All the Districts of the region except Varanasi and Allahabad where positive variations² 0.2% and 0.4% respectively were noted, followed the trend of the country and showed decline in the proportion, although the magnitude of fall varied from the maximum of 5.6 percent in Ballia District to the minimum of 0.5 percent in Basti District.

Until recently the organised industrial sector of this region was confined to the agro-based industries such as sugar, cotton textile, miscellaneous food preparations etc. and the

forest based industries like paper and paper products, timber etc. However, later on electricity generation, rail-road equipment work, electrical machinery, basic and industrial chemicals, aluminium, cement and fertilisers sprang up in this region. Sugar, cement, fertiliser and aluminium industries are important in the large scale sector in this region. Among the cottage industries, handloom works are very important in this region.

Even today the household industry reigns supreme in this region as it employed more than 63.00 percent of the industrial workers of this region in 1971. The industries and the constructional activities of this region are not uniformly distributed, rather they are more concentrated in the urban centres or in their nearby locations and so the distribution of such workers is also quite uneven. Its proportion varied from the maximum of 19.2 percent in Varanasi District to the minimum of 2.3 percent recorded by Bahraich District. A careful analysis of the proportions of industrial workers in the Districts of this region discloses the fact that all the Districts including that of Gorakhpur of the Trans-Ghaghra sub-region recorded the proportion of industrial workers below 6.5 percent which was the average for the region, while the District of Mirzapur in the southern upland region recorded its proportion more than the region's average. Almost all other Districts with exception of Varanasi, Faizabad and Azamgarh had their proportions ranging between these two extremes.

Two significant aspects of the distribution of industrial workers are their divisions into males and females and into different age-groups, for they provide the insight into the fact as to how the males and females of different age groups form the occupational categories of workers constituting the labour force of the secondary sector, and contribute towards the activities of this sector in this region.

7.3. Distribution of workers by sex and age groups:

According to 1971 census, there were 558,765 males and 76,690 females gainfully engaged in the occupations of the industrial sector of this region. The former constituted 87.93 percent and the latter 12.07 percent of the total workers engaged in this sector as compared to 93.5 percent and 6.5 percent respectively for the State of Uttar Pradesh. This points out that as compared to this state, the female participation in the labour force of this sector is more pronounced in this region. However, the proportion of females to the total workers of the industrial sector is lower than 14.3 percent which is the general female participation rate to the total female population of Eastern Uttar Pradesh. The female workers of this region are not uniformly distributed in the different occupational groups, rather their uneven distribution is the unique feature. The most dominant occupational group of the secondary sector is composed of the workers engaged in the household industry which alone accounted for about 85% of the female workers gainfully employed in this sector which is

Table VII-2

Distribution of male and female workers in the secondary sector in different District of Eastern Uttar Pradesh, 1971

Name of the District, Region, or State	Proportion of male & female workers in the Industrial sector		Proportion of workers of the occupational groups to the total working male and female population				Total industrial sector			
			(Va)		(Vb)		(VI)		Males	Females
	Males	Females	Males	Females	Males	Females	Males	Females		
1. Bahraich	96.3	3.7	0.9	1.4	1.1	0.3	0.3	0.2	2.4	1.9
2. Gonda	91.93	8.07	1.8	2.2	1.20	0.3	0.3	-	3.3	2.9
3. Faizabad	90.2	9.8	4.6	4.2	2.2	0.3	0.3	-	7.1	4.9
4. Sultanpur	87.8	12.2	3.3	2.9	0.6	0.2	0.2	0.1	4.1	3.2
5. Pratapgarh	86.0	14.0	3.5	2.9	1.1	0.2	0.2	-	4.8	3.1
6. Basti	87.6	12.4	2.5	2.8	1.3	0.5	0.1	-	3.9	3.3
7. Gorakhpur	92.4	7.6	2.2	1.8	3.0	0.7	0.4	-	5.6	2.5
8. Deoria	90.8	9.2	1.8	2.1	1.8	0.4	0.35	0.15	3.95	2.65
9. Azamgarh	75.3	24.7	5.9	12.3	2.0	0.8	0.2	0.1	8.1	13.2
10. Jaunpur	88.4	11.6	3.7	4.0	2.3	1.1	0.3	0.2	6.3	5.1
11. Ballia	83.6	16.4	4.1	5.4	1.7	1.1	0.4	-	6.2	6.5
12. Ghazipur	61.6	18.4	4.5	4.5	1.7	1.7	0.3	0.3	6.6	6.5
13. Varanasi	92.2	7.8	12.5	10.1	6.9	1.5	0.9	0.05	20.3	11.65
14. Mirzapur	93.2	6.8	4.0	2.1	4.8	0.5	0.6	-	9.4	2.6
15. Allahabad	82.3	17.7	5.1	6.6	2.4	1.2	0.3	-	8.8	7.8
E.U.P.	87.93	12.07	4.0	4.6	2.3	0.7	0.35	0.1	6.65	5.4
U.P.	93.5	6.5	3.6	4.0	3.9	1.0	0.7	0.1	8.2	5.1

- Means negligible.

followed by the manufacturing other than household industry with about 14.0 percent of female workers, the remaining nominal proportion of about 1.0 percent of the female workers was engaged in the activities of construction requiring hard manual labour. The high rate of participation of females in the household industry is due to the nature of the industry which is conducted within the premises of the house requiring less hard manual labour as compared to other activities of the industrial sector.

In the District of Bahraich, the male workers constituted as much as 96.3 percent of the working population in this sector. The female participation in general varied significantly from one District to another and in different occupational groups. For example, the ratio of female workers to the total workers in the industrial sector at the District level in this region ranged from the maximum of 24.7 percent in Azamgarh District to the minimum of 3.7 percent in Bahraich District. It may be here, pointed out that the Districts of the Trans-Ghaghra and the Southern upland sub-regions recorded the lower female participation with an exception of the District of Basti only wherein it was 12.4 percent. In almost all the Districts of Doab sub-region it was more than the average of 12.07 percent for the region except in few cases.

More meaningful results are brought to light if the proportion of male and female workers are taken separately and also if their proportions in the different functional groups of the industrial sector are considered. On the whole

in this sector the males composed of 6.65 percent and the females 5.4 percent of their respective total working male and female populations of this region. But there were considerable variations in the proportion of both, the male and female workers, constituting the labour force of the Districts (table VII-2). In the case of the males the variation is more pronounced, as it varied from the maximum of 20.3 percent in Varanasi District followed by Mirzapur 9.4 percent, Allahabad 8.8 percent and Azamgarh 8.1 percent to the minimum of again 2.4 percent in Bahraich District. In the case of female workers it was less pronounced because it varied from the highest proportion of 13.2 percent in Azamgarh District to the minimum of 1.9 percent in Bahraich District. The females participated and contributed to the activities of the secondary sector more actively in the Districts of Doab sub-region than in the Districts of other sub-regions.

It is seen that the household industry reigns supreme with the maximum proportion of workers of the industrial sector and it forms the largest functional group engaging 4.0 percent of the male workers and 4.6 percent of the female workers of the total male and female working population of this region.

The second largest functional group of workers was engaged in the manufacturing, processing, servicing and repairs other than the household industry and it composed of 2.3 percent and 0.7 percent respectively of the total male and female workers separately in the region of Eastern Uttar Pradesh. In this occupational group, the proportion of male workers varied

from the maximum of 6.9 percent in Varanasi District to the minimum of 0.6 percent in Sultanpur District, while it ranged from the highest of 1.7 percent in Ghazipur District to the lowest of 0.2 percent again in Sultanpur District in the case of female workers. The last functional group of workers of this sector was engaged in the activities of construction and maintenance and it formed the smallest group of workers engaged in the Secondary Sector. For males the proportion varied from the maximum of 0.9 percent in Varanasi District to the minimum of 0.1 percent in Basti District. The proportion of female workers in this functional group was very nominal in most of the Districts of this region as it was almost negligible. However, it ranged from the maximum of 0.3 percent in Ghazipur District to the minimum of 0.1 percent in Sultanpur and Azamgarh Districts. The above analysis of the variations in the proportions of workers engaged in the functional groups of the secondary sector at the District level in this region indicates the level of industrial efficiency and ability acquired by the people of these Districts in case of various groups of industries of the region.

The study of the age groups of the functional categories constituting the labour force of the industrial sector of this region points out that even the children, and the old and retired persons contribute significantly towards the occupations of this sector alongwith the persons of the effective population age groups which are in fact the major contributors.

It is quite evident from table VII-3 that of the total workers of the industrial sector in this region, 86.3 percent were in the age group of 15-59 years i.e. in the effective population age group, while the children upto 14 years of age constituted 5.9 percent and the retired and old persons contributed 7.8 percent of the total workers as compared to 87.9 percent, 4.4 percent and 7.7 percent respectively for the state of Uttar Pradesh. As compared to the state, the participation of persons from the age groups other than the effective population age group is more pronounced in this region in the industrial sector. However, the persons of the effective population age group are major contributors and their proportion does not fall below the minimum of 84.3 percent recorded by the District of Varanasi. The participation of the children in the age group of 0-14 years varied from the maximum of 8.8 percent in Varanasi District to the minimum of 3.3 percent recorded by Gorakhpur District. The participation rate of the persons in the age group of 60+ years in the functional activities of the secondary sector is more pronounced than the children because their proportion stood at 7.8 percent as against 5.9 percent of the latter. In case of their participation, the proportion ranged from the highest of 11.00 percent in Ballia District to the lowest of 6.3 percent recorded by Mirzapur District.

On the whole the contribution made by the persons of the age groups together other than that of the effective population age group stood at 13.7 percent for the region as against

12.1 percent for the State of Uttar Pradesh. The proportion of such workers varied ranging from the maximum of 15.7 percent in Varanasi District, closely followed by Ballia District with 15.3 percent and Allahabad District with 15.2 percent to the minimum of 10.5 percent recorded by Gorakhpur District. In this region on the whole the number of workers in the age group of 60+years out-numbered the workers in the age group of 0-14 years and such a trend was witnessed in almost all the Districts of this region except in those of Varanasi, Mirzapur and Allahabad where the latter out-numbered the former.

It is more significant to analyse the composition of male and female workers by age groups separately employed in the industrial sector of this region. The proportion of the effective population age group was 86.5 percent for males and 84.7 percent for the females in this region as against 88.2 percent and 83.4 percent respectively for Uttar Pradesh. Under this sector among the male workers, children (0-14 years) contributed 5.5 percent and the old and retired persons (60+ years) 8.0 percent as against 9.1 percent and 6.2 percent contributed by the female workers of these age groups respectively in this region. This shows that the proportion of children in case of male workers of this sector is lower than that of female workers but it is higher for males than for females in case of old and retired persons in this region. This reveals that the females join the labour force of this sector at earlier age but they retire from work also earlier than the males in the old age because of their multifarious activities at the

home front, such as to look after the welfare of their family members, particularly that of the children, and also because they develop disabilities at the advanced age.

The nature, scale and type of the particular industry also plays an important role in deciding the composition of workers by their sex and age groups. There is much variation in the composition of workers in the functional groups on the basis of their sex and age categories at the District level in this region which would be discussed in the latter part of this chapter.

7.4. Distribution of workers of the Industrial Sector by Rural and Urban Areas:

Although the activities of the industrial sector are more urban than rural in nature, yet much larger proportion of workers engaged in this sector in Eastern U.P. work and live in the rural areas, because this region is quite less urbanised. Of the total workers engaged in the different occupations of the industrial sector in this region, in 1971 only 30.9 percent worked and lived in the urban centres, while the remaining 69.1 percent worked and lived in the rural area. For male and female workers, the proportion working and living in towns stood at 32.0 percent and 23.7 percent respectively in this region as compared to 46.4 percent and 28.7 percent respectively in the state of Uttar Pradesh. This fact indicates that in comparison to this state, lower proportions of industrial workers were engaged in the urban areas of this region. The participation rate of female workers was more pronounced in the

Table VII-4

Distribution of total male and female workers engaged in industrial sector and its categories of occupations in proportion to their total, male and female workers by rural and urban areas for the Districts of this region as compared to the state, 1971

Distribution of total, male and female workers of industrial sector and by its occupation groups												
Name of the District, Region, State	Industrial sector						Va. Household Industry					
	Rural			Urban			Rural			Urban		
	T	M	F	T	M	F	T	M	F	T	M	F
	1	2	3	4	5	6	7	8	9	10	11	12
1. Baharaich	1.2	1.3	1.4	22.1	22.7	10.09	0.7	0.8	1.1	4.6	4.5	7.5
2. Gonda	2.5	2.4	2.5	21.4	22.0	11.9	1.7	1.6	2.0	4.8	4.7	6.9
3. Faizabad	4.3	4.4	3.4	33.2	33.0	35.0	3.3	3.3	3.0	17.7	16.8	28.1
4. Sultanpur	3.8	3.8	3.2	15.8	16.4	6.5	3.3	3.3	2.9	5.2	5.3	4.2
5. pratapgarh	4.2	4.5	3.0	17.5	18.4	8.9	3.3	3.5	2.8	4.5	4.5	5.6
6. Basti	3.5	3.5	3.3	16.2	17.0	6.8	2.4	2.4	2.8	5.9	6.1	4.1
7. Gorakhpur	4.0	4.45	2.1	19.9	19.9	17.75	1.7	1.8	1.5	7.1	6.7	13.4
8. Deoria	3.1	3.2	2.65	24.0	23.8	8.1	1.6	1.5	2.1	7.8	7.7	4.4
9. Azamgarh	5.6	5.55	6.65	60.5	53.0	85.7	4.1	3.8	5.9	51.7	42.2	83.3
10. Jaunpur	4.85	4.9	4.5	25.3	25.4	22.0	3.2	3.1	3.6	11.6	11.4	15.1
11. Ballia	5.7	5.7	6.5	16.0	16.7	8.8	4.2	4.0	5.4	7.2	7.3	6.3
12. Ghazipur	5.9	5.8	6.65	20.5	20.8	15.7	4.3	4.3	4.5	8.3	8.2	10.9
13. Varanasi	13.1	13.9	8.65	38.4	38.6	34.7	9.1	9.4	7.6	21.9	21.5	28.3
14. Mirzapur	5.1	5.95	2.2	31.0	32.3	12.95	3.4	3.8	1.9	5.6	5.4	7.6
15. Allahabad	8.15	8.3	8.5	37.0	38.0	28.5	6.0	5.9	6.4	20.5	20.9	16.9
E.U.P.	4.7	4.85	3.35	31.6	31.0	26.9	3.2	3.2	3.7	16.1	14.7	23.5
U.P.	4.95	5.1	3.81	28.5	28.8	23.2	3.1	3.1	3.1	7.6	7.1	16.5

Contd.

Table VII-4 (Contd.)

Name of the District, Region, State	Distribution of total, male and female workers of industrial sector and by its occupation groups												
	Vb. Other than Household Industry						VI. Construction						
	Rural			Urban			Rural			Urban			
	T	M	F	T	M	F	T	M	F	T	M	F	T
1	14	15	16	17	18	19	20	21	22	23	24	25	26
1. Baharalch	0.4	0.4	0.15	14.2	14.8	2.8	0.1	0.1	0.15	3.3	3.4	0.5	
2. Gonda	0.6	0.6	0.5	14.2	14.7	5.0	0.2	0.2	N	2.5	2.6	N	
3. Faizabad	0.8	0.9	0.4	14.3	14.9	6.9	0.2	0.2	N	1.2	1.3	N	
4. Sultanpur	0.4	0.4	0.2	8.4	8.8	2.3	0.1	0.1	0.1	2.2	2.3	nil	
5. Pratapgarh	0.8	0.9	0.2	11.0	11.7	3.3	0.1	0.1	N	2.0	2.2	N	
6. Basti	1.0	1.0	0.5	8.8	9.3	2.4	0.1	0.1	N	1.5	1.6	0.3	
7. Gorakhpur	2.1	2.4	0.6	11.5	11.8	4.2	0.2	0.25	N	1.3	1.4	0.15	
8. Deoria	1.2	1.4	0.4	13.6	13.5	3.6	0.3	0.3	0.15	2.6	2.6	0.1	
9. Azamgarh	1.4	1.5	0.7	7.6	9.2	2.3	0.1	0.15	0.05	1.2	1.6	0.1	
10. Jaunpur	1.5	1.6	0.9	11.4	11.6	6.8	0.15	0.2	N	2.3	2.4	0.1	
11. Ballia	1.3	1.4	1.1	7.2	7.7	2.3	0.2	0.3	N	1.6	1.7	0.2	
12. Ghazipur	1.4	1.3	1.7	10.2	10.5	4.7	0.2	0.2	0.35	2.0	2.1	0.1	
13. Varanasi	3.4	3.8	0.9	18.0	15.5	6.4	0.6	0.7	0.05	1.5	1.6	N	
14. Mirzapur	1.5	1.9	0.3	23.0	24.3	5.2	0.2	0.25	N	2.4	2.6	0.15	
15. Allahabad	1.9	2.1	1.1	15.8	16.3	11.4	0.25	0.30	N	0.7	0.8	0.2	
E.U.P.	1.3	1.4	0.6	13.7	14.4	3.3	0.2	0.25	0.05	1.8	1.9	0.1	
U.P.	1.5	1.6	0.7	18.5	19.2	6.2	0.35	0.4	0.01	2.4	2.5	0.5	

N = Stands for negligible proportion; nil = Stands for no strength.
 Proportion figures are based on: (i) Census of India 1971, Series 21, Uttar Pradesh.
 (ii) District Census Handbooks, 1971.

rural areas than in the urban areas of this region while that of males was more significant in the urban areas than in the rural areas of the region.

A careful perusal of the table VII-4 would reveal many interesting facts. It is not only the absolute strength of the workers of a particular functional group but it is also their ratio to the working population of the region which counts much in determining the character of the occupation by indicating whether it is more urban or more rural. For example, in 1971 although 69.1 percent of the workers of the industrial sector of this region worked and lived in the villages, yet they constituted only 4.7 percent of the rural working population of the region, whereas only 30.9 percent of workers living in the urban areas constituted as much as 31.6 percent of the working population of these areas in Eastern Uttar Pradesh. Therefore, it is the ratio of the workers of the occupational groups in the rural as well as in the urban area separately which matters much as the major determinant of the urban or rural character of the occupation. If we take the male and female workers separately for the rural and urban areas, we find that the proportion of the former was 4.85 percent and that of the latter 3.35 percent in the rural areas as against 31.0 percent and 26.9 percent respectively in the urban areas of this region. Therefore, the proportion of both the male and female workers of the secondary sector was many times more pronounced in the urban areas than in the rural areas of this region and this proves beyond doubt that the secondary sector

is more urban than rural in character. The proportion of both male and female workers, however, varied widely from one District to another in the rural as well as urban areas of this region. The range of proportions varied from the maximum of 13.9 percent for the males and 8.65 percent for the females in the Districts of Varanasi to the minimum of 1.3 percent and 1.4 percent respectively in Bahraich District in the case of rural areas of the region while in the case of urban areas it varied from the maximum of 53.0 percent for males and 35.7 percent for females in the District of Azamgarh to the minimum of 16.4 percent and 6.5 percent respectively in the District of Sultanpur.

7.5. Household Industries:

A household industry is defined as an industry conducted by the head of the household himself or herself and or mainly by the members of the household at home or within the village in the rural areas and only within the premises of the house where the members of the household live in the urban areas. The household industry relates to the production, processing, servicing and repairing works or making and selling of goods but not merely selling of goods. This industry is not run on the scale of a registered factory. Some examples of the typical industries* conducted as household industry are given in Appendix A3.

* As per Census of India, 1971, Series 1-India: Part II-A(i): General Population Tables, Ed. 1975, pp. 27-28.

Table VII-5

Distribution of male and female workers engaged at Household Industry, classified by Age-group, and rural and urban, 1971

Name of the Districts, Region, State	Proportion of workers	Sex composition		Age groups				Urban composition		Female ratio	
		M	F	0-14 yrs		15-59 yrs		Urban composition	Rural	Urban	Rural
				M	F	M	F				
1. Bahraich	42.2	93.2	6.8	4.2	7.5	87.4	83.9	22.9	6.6	7.3	7.3
2. Gonda	54.8	88.7	11.3	3.1	5.8	88.2	85.3	12.0	11.7	8.3	8.3
3. Faizabad	66.2	87.4	12.6	3.5	8.9	86.8	84.4	33.8	12.9	12.1	12.1
4. Sultanpur	82.5	86.6	13.4	4.0	5.2	83.4	86.1	2.8	13.7	4.6	4.6
5. Pratapgarh	77.1	83.1	16.9	3.2	6.3	85.0	83.9	2.5	17.1	10.0	10.0
6. Basti	66.8	84.5	15.5	3.4	8.3	87.2	85.4	5.0	16.1	4.6	4.6
7. Gorakhpur	41.4	87.0	13.0	3.3	8.9	87.1	81.3	21.6	13.9	10.0	10.0
8. Deoria	48.5	84.8	15.2	4.4	5.0	85.9	84.9	11.7	16.8	3.0	3.0
9. Azamgarh	77.8	70.5	29.5	5.0	11.4	85.2	85.2	44.3	23.2	37.4	37.4
10. Jaunpur	60.6	83.1	16.9	4.9	7.1	85.7	87.4	19.2	16.5	8.1	8.1
11. Ballia	69.4	80.5	19.5	3.9	7.0	83.3	87.1	7.2	20.5	7.7	7.7
12. Ghazipur	69.3	81.7	18.3	3.7	11.7	84.7	80.3	7.1	19.1	8.1	8.1
13. Varanasi	63.8	89.4	10.6	10.0	10.4	82.1	83.4	43.2	12.7	8.2	8.2
14. Mirzapur	45.6	87.8	12.2	9.9	12.8	81.4	77.0	16.7	12.9	8.8	8.8
15. Allahabad	72.3	79.4	20.6	7.1	5.0	86.5	90.6	4.5	21.3	7.5	7.5
E.U.P.	62.8	83.7	16.3	6.1	9.1	84.6	84.8	25.2	16.5	15.8	15.8
U.P.	46.4	89.2	10.8	4.6	9.6	85.3	83.5	26.0	10.8	11.0	11.0

Note: Figures are in percent.

7.5. Distribution of workers engaged in the Household Industries:

These workers form a major occupational group of secondary sector in the region of Eastern U.P. and for the first time such workers were treated independently under a separate functional group at 1961 census. Then they numbered 6.95 lakhs of persons and accounted for more than 77 percent of the workers of the industrial sector. Their strength declined to 3.99 lakhs of persons in 1971 and it constituted 62.8 percent of the workers of this sector in this region. The tremendous fall in the size of the workers of this functional group from 1961 to 1971 was partly due to the destruction of indigenous industries, because of more attention diverted towards the development of industries other than the household industries and partly due to the stricter definition of 'worker' adopted at 1971 census, as it was much on the liberal side in 1961 and so inflated the number of workers engaged in the household industries.

Now it is quite evident that the proportion of workers engaged in the household industries to those of this sector for the region stood at 62.8 percent as against 46.4 percent for the State of Uttar Pradesh, indicating the comparative predominance of household industries in this region. The degree of predominance of this functional group of workers varied significantly from the maximum of 82.5 percent in Sultanpur District to the minimum of 41.4 percent in Gorakhpur District. This means that the districts showing a higher percentage of workers in this group of industries are neglected in respect of the other industrial activities and the activities of construction.

This analysis further clarifies the potential capacities of the districts for gainful employment of persons. It indicates that the labour intensive household industries, using less amount of resources and undertaking production on small scale basis, should be more vigorously developed in the region in order to absorb the surplus labour of agricultural sector as well as the progressively increasing number of unemployed persons from year to year.

It is evident from the table VII-5 that the participation ratio of females in this functional group is quite high in this region as compared to the state of Uttar Pradesh. It was 16.3 percent for this region as against 10.8 percent for this State. However, the participation rate is not similar all over the region. It shows considerable amount of variation ranging from the maximum of 29.5 percent in Azamgarh District to the minimum of 6.8 percent in Bahraich District. The ratio of female workers in the household industries is quite encouraging in many Districts of this region and it is evident that in future such industries would absorb most of the females readily available to join the labour force in order to earn their livelihood or to supplement their family income.

The composition of male and female workers by their age-groups is quite significant and interesting. The persons of the effective population age-group constituted as much as 84.7 percent of the workers of this region as against 85.1 percent of those of U.P. under this occupational group. However, this percentage differs slightly for males and females separately

as it stood at 84.6 percent for the former and at 84.8 percent for the latter in this region as against 85.3 percent and 83.5 percent respectively for the State of Uttar Pradesh. Therefore, the persons from the age groups other than those of effective population age group also contributed significantly to this occupation as they constituted 15.4 percent of the male and 15.2 percent ^{of} the female workers engaged in this region in the household industries. However, this proportion differed considerably for these age groups, for example for the age-group 0-14 years it was 6.1 percent for males and 9.1 percent for females, whereas in the case of workers of the age group of 60 and above years, it stood at 9.3 percent for the former and at 6.1 percent for the latter (Table VII-5). There are still more variations in this respect at the district level. The extent of participation of the persons from the age-groups other than those of effective population age-group, is indicative of the general economic, social and demographic conditions prevailing in the society in this region and the proportional variations of workers denote variations in such conditions from one administrative unit to another. Such proportional variations are noticed even at the village and the family level, which depict the micro-level variations of these factors.

The analysis of the sex composition of the rural and urban working population separately for the administrative unit of this region shows a considerable amount of variation. On the average, out of per 1000 workers there were 163 female workers engaged in the activities of the household industries in 1971

as against 165 and 158 female workers in the rural and urban areas of this region separately under this functional category. Therefore, at the level of the region as a whole there is no material difference in respect of the female participation in the labour force engaged in this occupational category but the comparison of such figures at the district level shows a considerable degree of variation in the rural working population and still greater variation in respect of the urban working population. The ratio of female workers varied from the maximum of 23.2 percent in the District of Azamgarh to the minimum of 6.6 percent in the District of Bahraich in case of the rural working population while in the case of the urban working population it ranged from the highest of 37.4 percent again in the District of Azamgarh to the lowest of 3.0 percent in the District of Deoria. This points out that the female participation is more pronounced in the rural areas than in the urban areas of this region. The District of Azamgarh records the maximum participation rate of females in the rural as well as in the urban working population of the region under this industrial category. Among the other districts recording more than 16.5 percent of this ratio which is the average ratio of the female workers for this region, are Ballia (20.5%), Ghazipur (19%), Pratapgarh (17.1%) and Deoria (16.8%) while Jaunpur maintained just the average ratio and all other district fell below the average. With exception of Azamgarh and Bahraich districts where the female ratio in the urban working population exceeded the female ratio in the rural working population, the trend was reverse in all other

Table VII-6

Distribution of the workers engaged in Household Industries
in the Tahsils of Eastern Uttar Pradesh, 1971

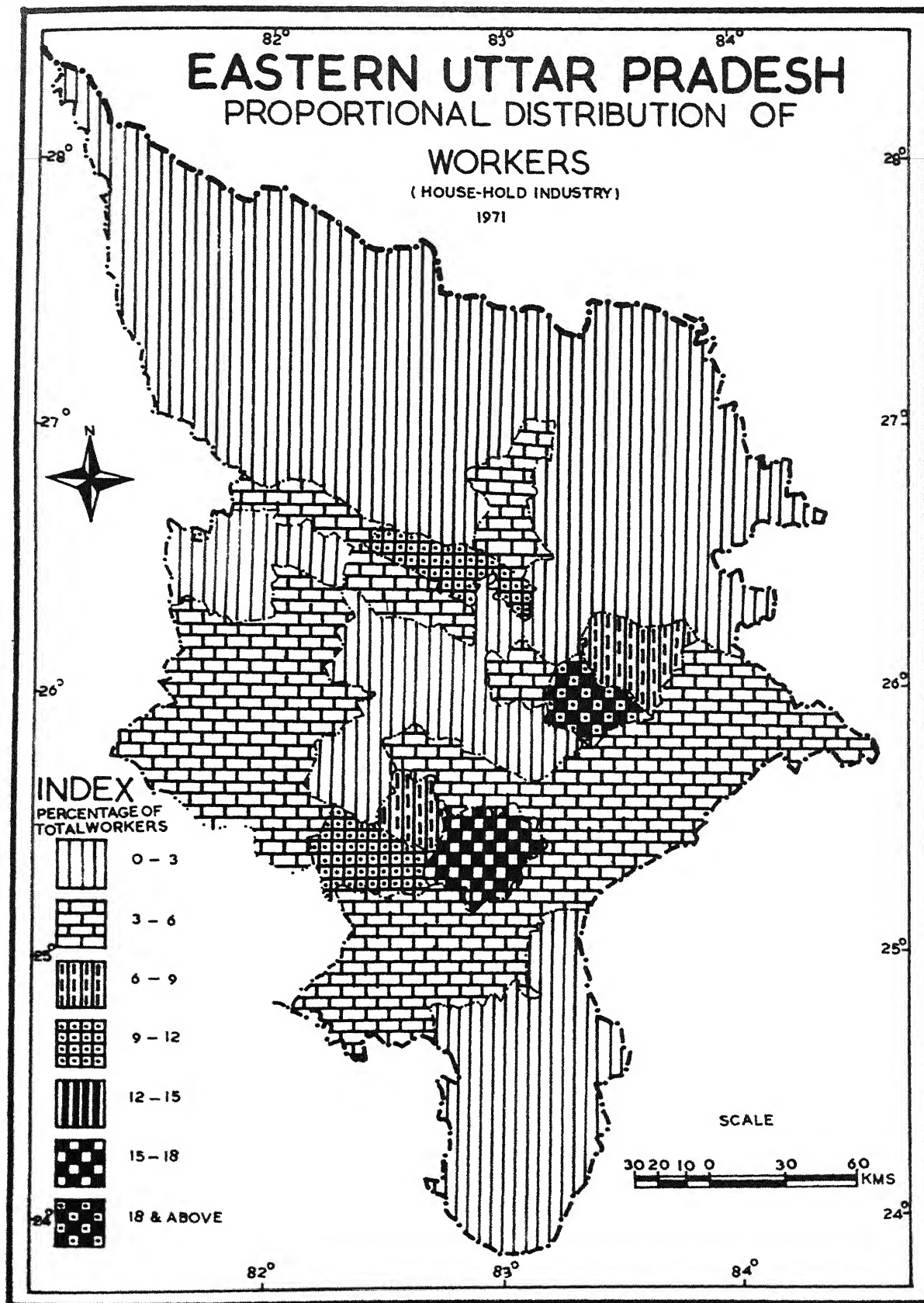
Name of Tahsil	Proportion to the total working population			Sex ratio per 1000 workers
	P	M	F	
1. Nanpara	1.1	1.04	2.4	91
2. Kaiserganj	0.5	0.5	0.4	34
3. Bahraich	1.2	1.2	1.2	60
4. Balrampur	2.15	2.25	1.45	89
5. Utraula	2.1	2.15	1.5	76
6. Gonda	1.85	1.6	5.4	186
7. Tarabganj	1.0	0.9	1.7	113
8. Faizabad	3.1	3.2	2.2	91
9. Bikapur	1.6	1.7	1.5	148
10. Akbarpur	4.6	4.5	4.9	138
11. Tanda	9.1	9.1	9.1	128
12. Musafirkhana	2.8	3.0	1.7	105
13. Amethi	3.5	3.8	2.6	163
14. Sultanpur	4.4	4.2	5.4	149
15. Kadipur	2.4	2.45	2.1	100
16. Kunda	3.5	3.55	3.3	192
17. Pratapgarh	3.5	3.8	2.4	149
18. Palti	3.1	3.1	3.1	163
19. Domnanganj	1.8	1.9	1.2	87
20. Naugarh	1.7	1.8	1.1	103
21. Bansi	3.0	2.8	4.2	209
22. Basti	2.0	2.05	1.6	100
23. Khalilabad	4.9	4.6	6.4	198
24. Harraiya	1.2	1.3	0.8	93
25. Pharenda	1.3	1.35	1.0	111
26. Maharajganj	1.1	1.15	0.9	107
27. Gorakhpur	2.9	3.0	2.5	121
28. Bansgaun	2.5	2.6	2.0	167
29. Hala	1.9	1.8	2.7	149
30. Padrauna	1.5	1.5	1.5	119
31. Deoria	2.3	2.7	1.8	138
32. Salempur	2.0	1.8	2.8	200
33. Sagari	2.1	2.2	1.6	104
34. Ghosi	7.8	6.2	14.0	377
35. Azamgarh	3.15	3.2	2.9	113
36. Mohemmadabad	19.2	16.3	31.1	319
37. Phulpur	2.5	2.3	3.3	201
38. Lalganj	3.0	2.7	4.2	241
39. Shahganj	2.5	2.53	2.4	103
40. Machhlishahar	2.5	2.8	1.7	126

Contd.

Table VII-6 (Contd.)

Name of Tahsil	Proportion to the total working population			Sex ratio per 1000 workers
	P	M	F	
41. Jaunpur	4.2	4.0	5.7	285
42. Mariahu	6.1	6.12	6.0	171
43. Kerakat	3.3	3.2	4.3	174
44. Rasra	4.1	3.4	4.9	198
45. Bansdih	3.6	3.5	5.2	194
46. Ballia	5.1	4.8	7.0	195
47. Saidpur	4.0	3.9	4.3	187
48. Ghazipur	4.5	4.4	4.9	169
49. Mohemmdabad	5.0	5.2	4.0	161
50. Zamania	4.8	4.6	5.4	222
51. Gyanpur	11.2	11.7	8.3	115
52. Varanasi	17.1	17.2	17.0	106
53. Chandauli	4.4	4.43	4.2	138
54. Chakia	2.9	3.3	1.4	96
55. Mirzapur	5.3	5.8	3.1	108
56. Chunar	4.9	5.4	3.0	122
57. Robertsganj	1.2	1.4	0.25	157
58. Dudhi	1.8	1.7	1.9	187
59. Soroan	4.1	4.6	2.3	118
60. Phulpur	5.3	5.2	6.3	200
61. Handia	9.1	8.7	10.9	251
E.U.P.	4.1	4.0	4.6	163

Source: Figures are calculated and based on Census of India, 1971. P. Persons, M. Males, F. Females.



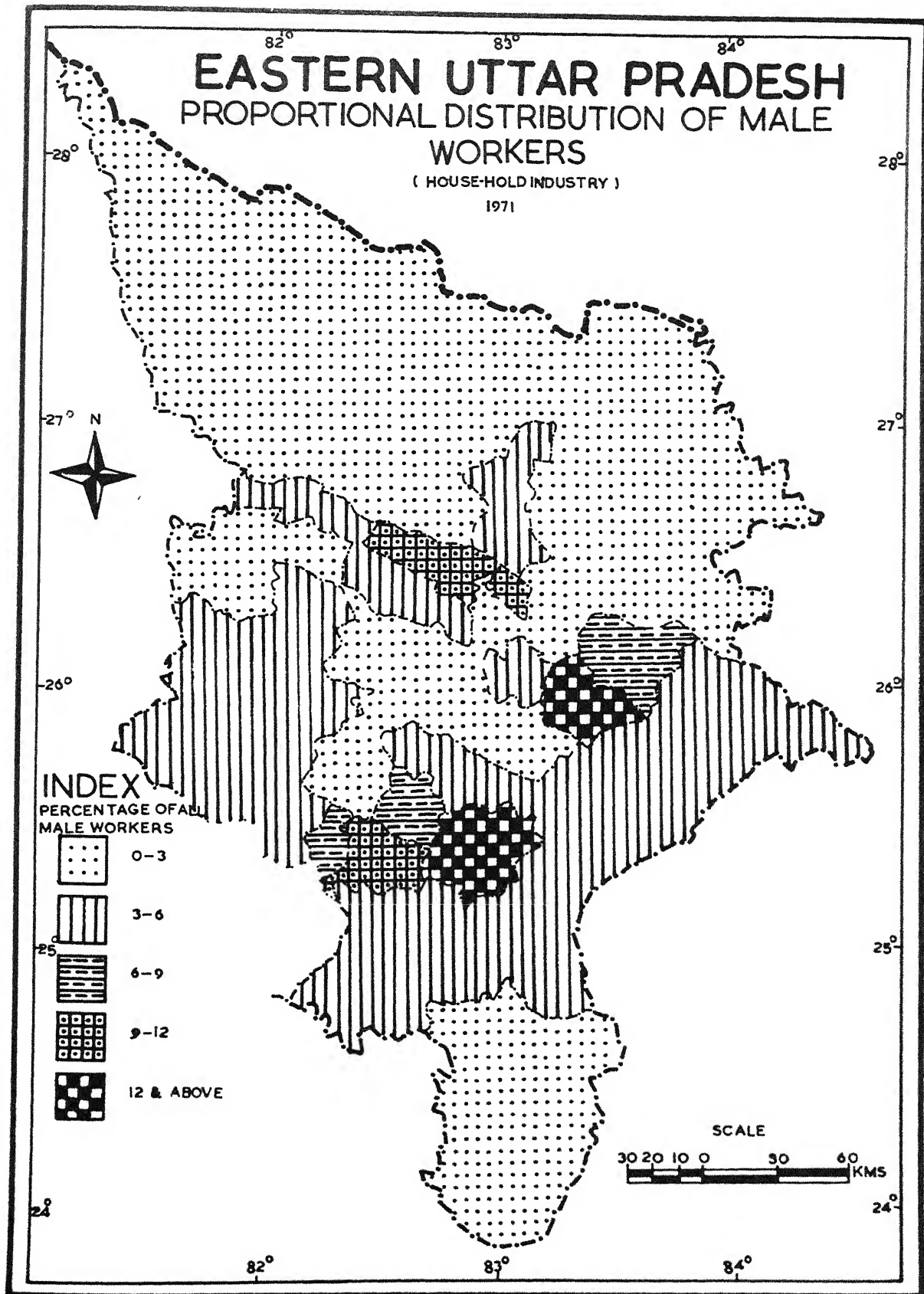
FIGNO.35

districts of this region.

Now coming to the analysis of the pattern of distribution and composition of workers engaged at the Tahsil level in this region in the household industries, it is found that the variations are still more interesting (Fig. 35).

Even at the Tahsil level, it is the largest employer in almost all the Tahsils of the region except few of them (where the workers of this functional group formed the second largest category as the largest group was constituted by the workers gainfully employed in the manufacturing other than the household enterprises). The Tahsils recording exceptions are those of Bahraich, Tarabganj, Faizabad, Basti, Gorakhpur, Pharenda, Maharajganj, Robertsganj and Dudhi. It is quite interesting to note that out of nine such Tahsils, six are located in the Trans-Ghaghra sub-region, two in the Southern Uplands sub-region while Faizabad stands as a singular example from the Doab sub-region.

Household industries engaged 4.1 percent of the total working population of the region. The proportion of such workers varied considerably at the District level and even more widely at the Tahsil level as is evident from the figures provided in the table ~~III~~-6. It ranged from the maximum of 19.2 percent in the Tahsil of Mohammedabad (Azamgarh) to the minimum of 0.5% in the Tahsil of Kaiserganj. Among other Tahsils, with more than 5.0 percent of such workers were Gyanpur, (11.2 percent), Tanda and Handia (9.1 percent each), Ghosi (7.8 percent), Mariahu (6.1 percent), Mirzapur and Phulpur (5.3 percent each),



FIGNO.36

and Ballia (5.1 percent). Tahsil Varanasi is a category in itself and recorded more than 15 percent. All of them are located in the Doab sub-region with the exception of Mirzapur tahsil of the Southern Upland sub-region. Kaiserganj and Tarabganj Tahsils of Trans-Ghaghra tract maintained no urban centres and hence the industrial activities were very poor there. All the Tahsils have been categorised into seven classes based on the proportions at the interval of 3.0 percent as shown in Fig. 35.

The Fig. 35 shows the high degree of concentration of household industries in some of the tahsils of the region. Out of sixty one tahsils comprising this region, fifty four recorded less than 6 percent of their working population engaged in the household enterprises. About half the tahsils maintained even less than 3 percent of this ratio. Therefore, the distribution of such workers at the tahsil levels points out the fact that most of the tahsils are very much backward industrially and the majority of such tahsils are located in the Trans-Ghaghra sub-region. The above discussion in respect of the distribution of workers engaged in household industries at the tahsil level, can be better understood in the form of frequency analysis and by means of graphical devices.

A glance at the frequency distribution (Table VII-7) and its graphical representation (Fig.39) enables us to point out the range of proportional differentials in case of the workers engaged in this functional group at the tahsil level.

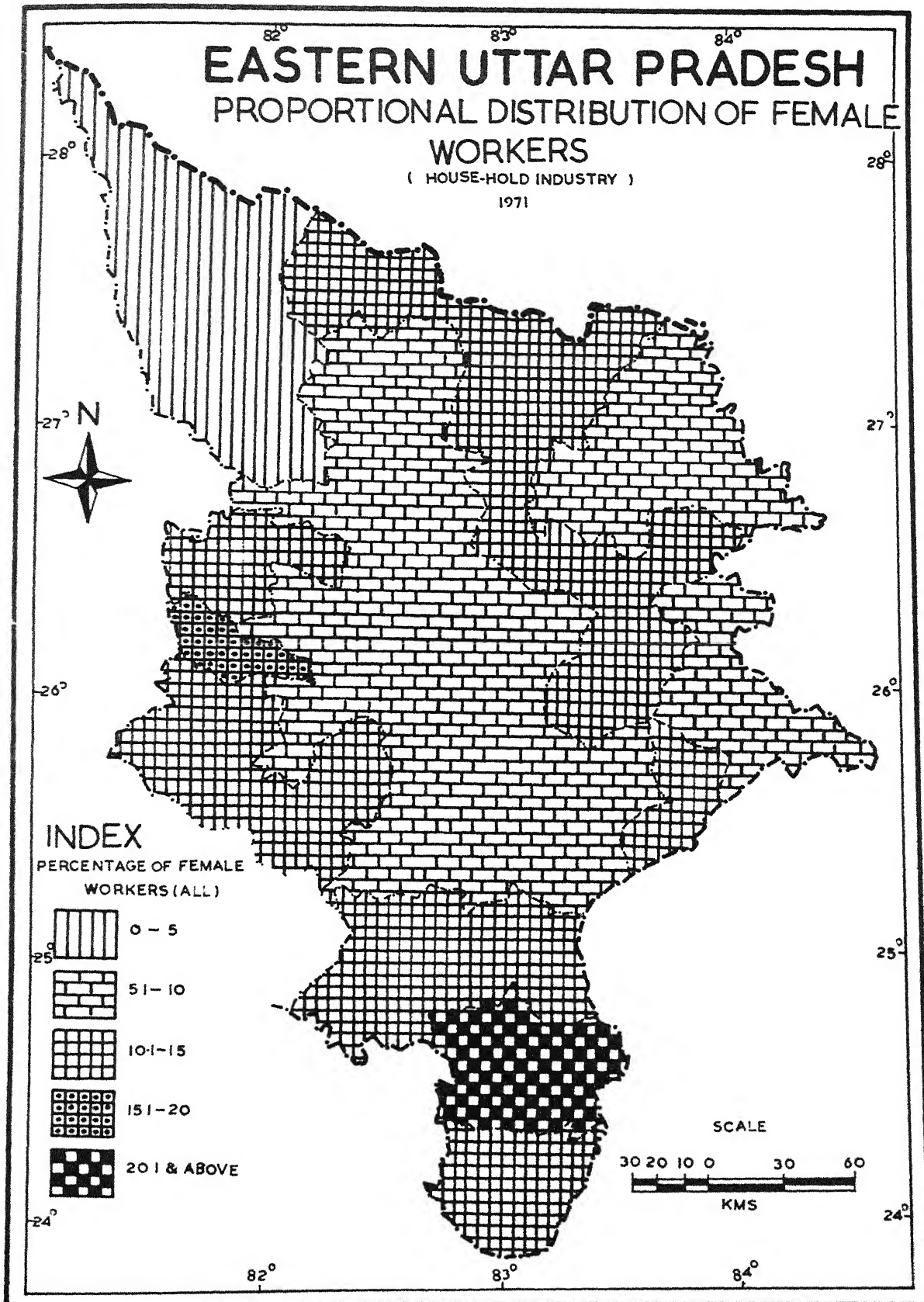
Table VII-7

Frequency distribution of workers engaged at Tahsil level in the Household industries in Eastern U.P., 1971.

Categories	Classes of proportion	Frequency of tahsils	Cumulative frequency of tahsils
I.	Below 3.0 percent	31	31
II.	3.1 to 6.0 percent	23	54
III.	6.1 to 9.0 percent	2	56
IV.	9.1 to 12.0 percent	3	59
V.	12.1 to 15.0 percent	Nil	59
VI.	15.1 to 18.0 percent	1	60
VII.	Above 18.1 percent	1	61

The proportions of male and female workers separately to their respective working populations at the Tahsil level (Table VII-6 and Figs. 36 & 37) gives a comprehensive idea as to how they constitute and contribute to the activities of the household enterprises. But a clearer picture is brought to light when we analyse the number of female workers per 1000 workers in all the Tahsils of the region. This gives the sex composition of workers (Table VII-6). The number of female workers per 1000 workers at the Tahsil level ranged from the maximum of 377 in Ghosi to the minimum of 34 in Kaiserganj.

An analysis of the distribution of workers engaged in the household industries in Eastern Uttar Pradesh shows the areas of concentration of such activities. It also indicates the importance of Tahsils in order of proportion of such workers



FIGNO. 37

to the total workers engaged in this functional group. Twenty two tahsils out of sixty one had more than 5,000 workers engaged in the household industries. The maximum concentration of such workers was seen in the tahsil of Varanasi with 18.53 percent followed by Tahsils of Mohemmedabad with 7.90 percent, Gyanpur with 4.36 percent etc. to the minimum of 1.29 percent in Pratapgarh Tahsil. The table VII-8 provides the details of such workers in all the twenty two tahsils of the region showing their absolute numbers and proportions to their total strength engaged in this occupational group in Eastern Uttar Pradesh.

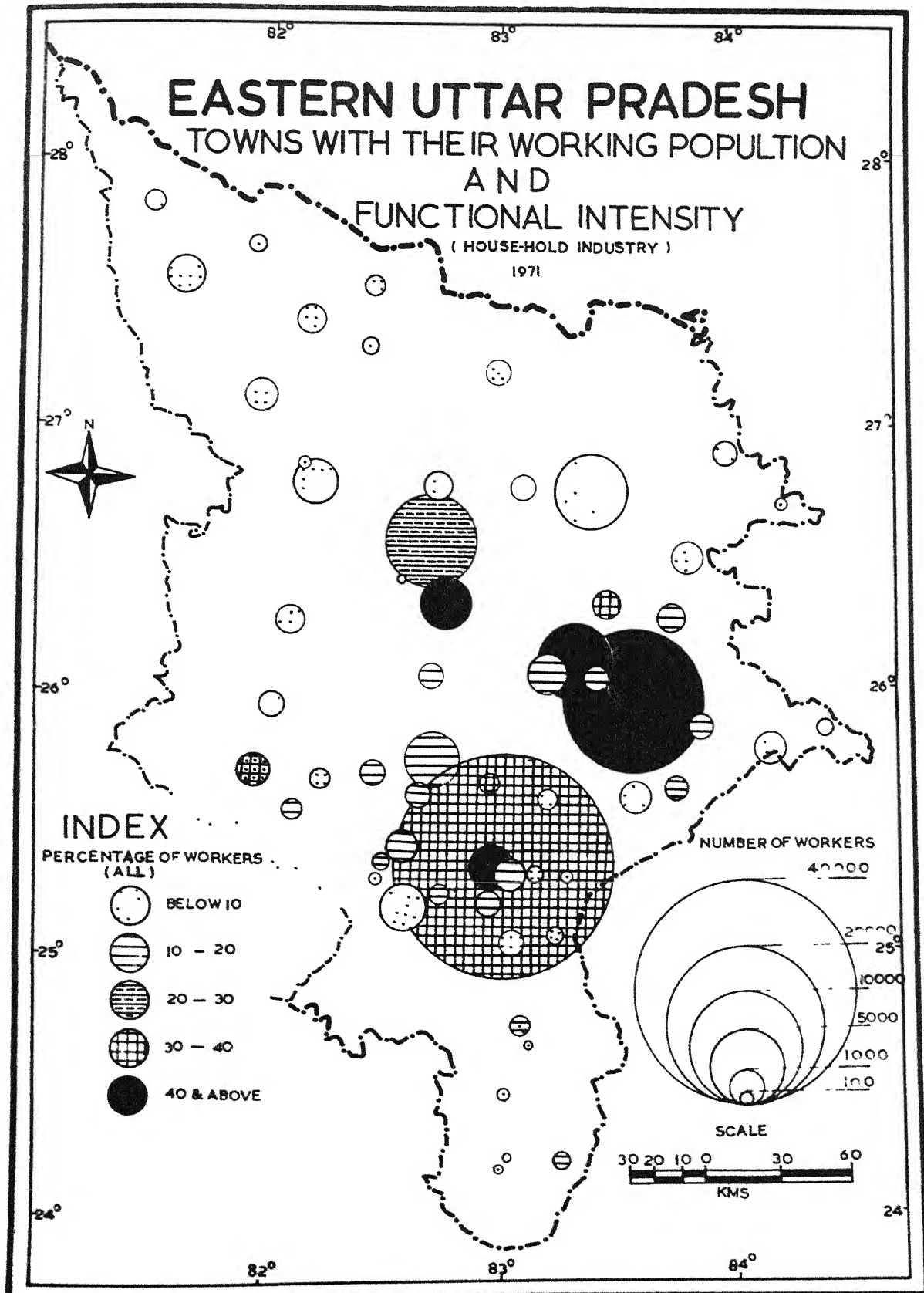
Eastern Uttar Pradesh accounted for about 40.0 percent of the total workers engaged in the household industries in the State of Uttar Pradesh. As such ^{these} enterprises hold a unique importance in the industrial economy of the region. The Tahsil of Varanasi showed the largest strength of workers and together with Mohemmedabad Tahsil it accounted for more than one-fourth of workers engaged in this functional group in this region. In all the twenty two tahsils the absolute number of workers engaged accounted for more than 67.0 percent of the total workers employed in the household enterprises.

The study and analysis of the distributional pattern of workers in the individual urban centres of this region, forms the contents of the paragraphs to follow because they play a prominent role in the development of such industries. Such a study indicates the relative importance of the urban centres in respect of this functional group.

Table VII-8

Distribution of Tahsils with more than 5,000 workers engaged
in the Household Industries

Name of Tahsil	Strength in	
	Absolute Nos	Percent
1. Varanasi	73,964	18.53
2. Mohamdabad	31,585	7.90
3. Gyanpur	17,403	4.36
4. Tanda	12,282	3.08
5. Ghosi	11,962	3.00
6. Gorakhpur	10,457	2.62
7. Mirzapur	10,333	2.60
8. Khalilabad	10,188	2.55
9. Handia	9,914	2.50
10. Ballia	8,555	2.14
11. Chanduli	7,985	2.00
12. Sultanpur	7,623	1.76
13. Mariahu	6,231	1.56
14. Chunar	6,053	1.53
15. Mohemmedabad	5,954	1.50
16. Rasra	5,801	1.45
17. Saidpur	5,644	1.41
18. Phulpur	5,461	1.40
19. Kunda	5,512	1.38
20. Bansaon	5,398	1.35
21. Jaunpur	5,243	1.31
22. Pratapgarh	5,163	1.29
Total of E.U.P.	268,160	67.20
Total of U.P.	399,099	40.00
	10,016,025	100.00



FIGNO.38

The city of Varanasi (U.A.) with the maximum number of workers engaged under the category of household industries occupied the first place in the region, followed by Maunath Bhanjan at the second place, Tanda at the third place and Mubarakpur at the fourth place. All other towns of the region engaged less than 5,000 workers under this functional category. But such an analysis does not indicate the specialisation of a particular function in these centres. The urban centres are multi-functional in their nature. But the dominant activity of each of them may be regarded as its main function. If an activity is concentrated in a town in a large degree, it dominates the economic life of the people and becomes its major function. Therefore, agreeing with Nelson fully it may be said that the proportion of labour force of cities engaged in performing a service is the best means of measuring the distribution of that activity. Hence the specialisation in the household industry will be determined by the proportion of the labour force engaged at different centres. Based on the proportion of labour force engaged in this activity, Mubarakpur (where 73.2 percent of the labour force was engaged in the household industries) ranked first, followed by Lohta with 70.5 percent, Kopaganj with 70.4 percent, Maunath Bhanjan with 62.5 percent, Jalalpur with 53.4 percent, Tanda with 46.4 percent, Mau Aima with 31.6 percent and Varanasi with 24 percent (Fig.38). Many of these urban centres are important in other activities.

Further to have a comprehensive comparison and contrast by having a glance as to how many urban centre fell under

EASTERN UTTAR PRADESH TAHSILS & TOWNS WITH THEIR WORKERS ENGAGED IN HOUSE-HOLD INDUSTRY

1971

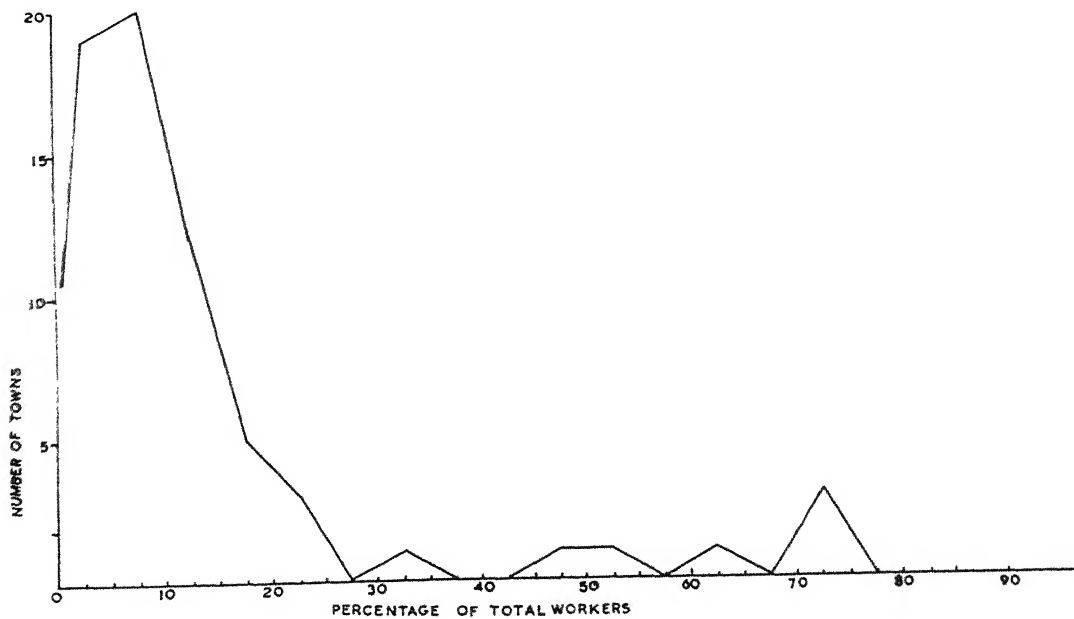
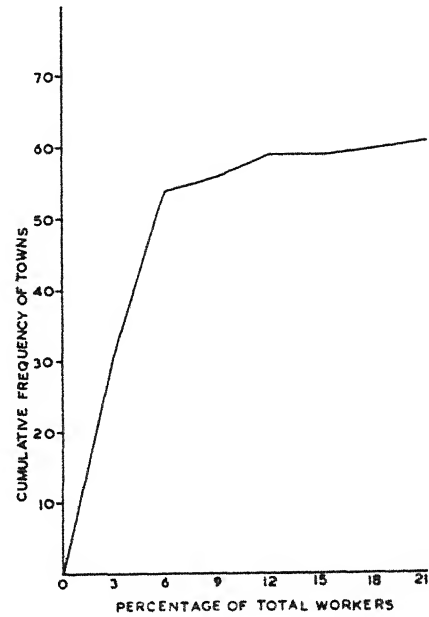
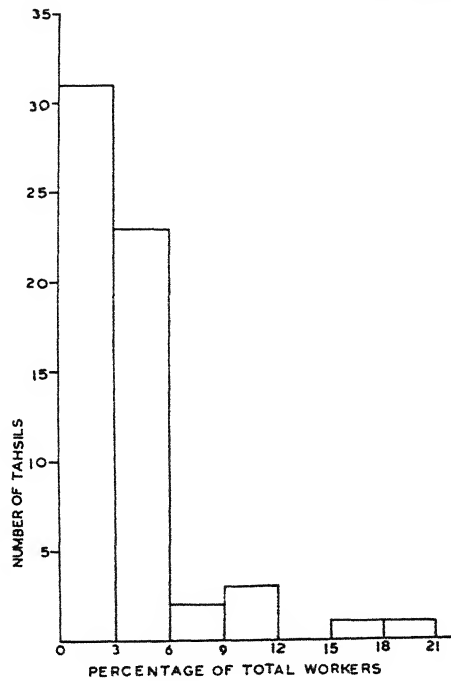


FIG NO 39

different groups of proportions, it is worthwhile to group the urban centres into the following categories based on the proportion of workers engaged in this function at the interval of 10.0 percent and representing them graphically Fig.39. The following table shows the details in the matter.

Table VII-9

Frequency distribution of workers in urban centres (Household Industries) Eastern Uttar Pradesh, 1971

Groups of proportions	Frequency of urban centres	Cumulative frequency of urban centres
Below 10 percent	39	39
Between 10 to 20 percent	17	56
Between 20 to 30 percent	3	59
Between 30 to 40 percent	1	60
Between 40 to 50 percent	1	61
Between 50 to 60 percent	1	62
Between 60 to 70 percent	1	63
Above 70 but below 80 percent	3	66
	<u>66</u>	<u>66</u>

It is evident from the frequency distribution and its graphical representation that thirty nine Tahsils were noted for less than 10 percent of the labour force engaged in this activity and 17 tahsils had proportion between 10 to 20 percent. The above distribution clearly points out that a very few centres specialised in the household industries in this region.

As the household industries are labour intensive, the employment generated by them per unit of investment is greater than others. Such industries have particular advantage of utilising the labour force of the whole family and they offer

special boon to the female members of the society. This is why the proportion of female participation in the labour force engaged in this industry in this region is quite appreciable, although it is less pronounced in its urban areas than in its rural areas. The female participation under this functional group ranged from the maximum of 387 in Gopiganj Tahsil to the minimum of 13 in Tulsipur Tahsil per 1,000 workers. There are six urban centres namely, Colonelganj, Maruadih, Renukoot, Gosaiganj, Chopan and Markundi with no female worker participating in the labour force engaged in this activity. This is mainly due to the nature of ^{these} industrial units, the social conditions and the demographic structure of population of these urban centres.

However, the household enterprises ^{play} significant role in the economy of this region. As these enterprise are labour intensive and they use less amount of resources and undertake production on small scale basis, they are very much suited to the region of Eastern Uttar Pradesh. This is mainly due to the economic conditions prevailing in this region e.g., the predominance of agriculture, lack of capital and entrepreneurship, large population, low per capita income and lack of mineral resources etc. The expansion of the household enterprises is greatly needed in this region in view of their vast employment potential, relatively low unit investment, short gestation periods, simple techniques of production, wide disposal possibilities of the products, easy availability of required machinery and equipment, quick mobilisation of entrepreneurial

motivation through the growing population of towns and urban centres and their big scope to manufacture a large variety of consumer goods. Household industries have a special advantage of producing artistic goods with intricate designs. As the work in this case can be done even on a part time basis and the labour is readily available mostly from the members of the family who easily take part in the production, it provides a special boon to the large agricultural population of this region. In a region like Eastern Uttar Pradesh which has great unemployment and underemployment, the household industries play their special role in absorbing most of the persons seeking employment who need not migrate to the urban centres in search of their employment. This work can be done to a large extent in the slack agricultural season. Most of the persons depending on agriculture have sub marginal productivity and at least in the near future it is not possible for them to shift to industries completely. Thus the household industries will continue to occupy a prominent place in the economy of this region because they will provide additional source of income to such persons. Hence great efforts should be made for their large development and efficient working.

Now we shall discuss some of the important household enterprises of the region.

(a) Handloom Weaving: It is the largest household industry of the region and is carried on mostly by Muslims, (Julahas), Dhuniyas etc. on traditional pattern and small scale basis. Some other castes have also joined this trade. A wide variety of

products are manufactured, ranging from the simplest forms of weaving on traditional handlooms to a very specialised form of fine silk weaving. The Chief handloom weaving centres of this region are Maunath Bhanjan, Mubarakpur, Kopaganj (all the three in Azamgarh District); Tanda, Akbarpur, and Jalalpur (all three in Faizabad District); Khalilabad, Magahar (both in Basti District); Mau Aima (in Allahabad District); and the headquarters of Gorakhpur, Ghazipur, Pratapgarh and Sultanpur Districts.

(b) Silk Handloom weaving: It is done at Varanasi, Maunath Bhanjan and Mubarakpur. Varanasi is its most important centre known all over the world. Silken sarees of Varanasi have an international market and are reputed for their quality and design. Of late, Varanasi silk sarees have found their way to the European markets and efforts should be made to popularise them in other countries also.

(c) Besides the above mentioned important industries which are run by the household enterprises, there are a score of other such industries which occupy a significant place in this region, such as carpet weaving done in Bhadhohi of Varanasi District and at certain centres in Mirzapur; brass ware works of Varanasi and Mirzapur; Calco Printing of Tanda; Gold ~~the~~ thread industry of Varanasi; Sutli and Tatpatti industries of Jaunpur, Pratapgarh and Sultanpur Districts; Perfumery works of Jaunpur and Ghazipur Districts etc. Thus the household industries are very important in this region. Their development would surely strengthen its economic structure. At the same time it would provide employment opportunities to thousands of unemployed workers of this region.

7.6. Manufacturing, Processing, Servicing and Repairing Works conducted on other than Household Industry:

Even the primitive man shaped crude weapons and manufactured rough clothing materials. In due course he travelled a long way from the old days when he used to shape things by hand. Now he is engaged in processing and fabrication of raw materials into goods of higher value with the aid of machineries. Manufacturing industries cover all those activities by which pure raw materials, partly finished raw materials or potential components are converted into a more usable nature or form. The term industry is often used in a general sense to denote manufacturing.¹ He now uses as little human labour as possible in the process. The rest is done by machineries themselves. Each invention enormously increased the productivity of labour and acted as stimulant for many other products. This brought about revolutionary changes in the methods of production, the modes of transport and the prospects of long distance sale of goods. The modern factories employed thousands of workers whose number was many times larger than those of the old workshops which are now being discarded. But the modern industries required huge amount of capital and raw materials, because the manufacturing is now done mostly by large scale and small scale industries which are capital intensive and which utilise large volumes of raw materials. A reference has been made as to what this industrial category stands for and consists of, Appendix A1. The strength of the workers of this industrial category may be termed as a 'Barometer' to measure the strength of the economy of a region.

7.7. Distribution of workers engaged in Manufacturing, Processing, Servicing and Repairing Works conducted on other than Household Industry:

The workers engaged in the manufacturing, processing, servicing and repairing works carried on by other than household industries constitute a sub-functional group of workers of this industrial sector. They constitute a smaller functional group than that of the workers engaged in household industries in this region. This indicates that the manufacturing industries carried on the large scale and small scale basis are quite limited in number and they are mostly concentrated either in few urban centres or their adjacent areas except in case of industries like sugar manufacturing which have rural orientation. For the first time these workers were treated independently and put under a separate occupational category in 1961 when they numbered 157,241 and formed a low proportion of 17.5 percent of the industrial workers of this region. The strength of such workers rose to 20,6660 in 1971 which constituted as much as 32.5 percent of the total workers engaged in the activities of the secondary sector in this year. The increase in the number of workers in 1971 over that of 1961 accounted for the rise of their proportion to the total working population of the region from 1.4 percent in 1961 to 2.1 percent in 1971 as compared to 2.8 percent and 3.6 percent respectively for the State of Uttar Pradesh. These figures indicate that in respect of the manufacturing industries other than the household industries, this region lagged much behind the industrial development of this State as a whole.

The industrial activities carried on by the large scale and small scale industries other than the household industries are more concentrated than the activities of the household enterprises. These industrial units are generally located either in the urban centres or in the adjoining surrounding where the advantages of power, the facilities of assemblage of raw materials, and linkage of transportation to markets etc. are more easily and readily available. Since the large scale industries are mostly located in cities, hence the small scale industries tend to be located in or near these centres, because the factors congenial to the growth and development of such industries are easily available there. But the household industries are not so much concentrated, rather they are comparatively scattered in this region. According to 1971 census the proportion of workers engaged in other than household industries ranged from the maximum of 6.2 percent in Varanasi District to the minimum of 0.5 percent in the District of Sultanpur. Except the Districts of Gorakhpur, Mirzapur and Bahraich where the size of the workers of this functional group and the resultant proportions to their respective working populations were higher than the corresponding figures for the workers gainfully employed in the activities of the household industries, all the Districts of the region followed the general pattern of a lower proportion of workers in the former case than in the latter case in this region as well as in this State.

The workers of this functional group form a higher proportion in the urban areas than in the rural areas if rural

and urban working populations are taken into consideration separately. They constituted 1.3 percent in the rural areas and 13.7 percent in the urban areas as against 1.5 percent and 18.5 percent respectively for the state of Uttar Pradesh. The proportion of such workers varied significantly in the former case from the maximum of 3.4 percent in Varanasi District to the minimum of 0.4 percent in Sultanpur District, while in the latter case the highest of 23.0 percent was recorded in the District of Mirzapur and the lowest of 7.2 percent in the District of Ballia. It shows that this function is primarily urban and the workers engaged in its occupy a unique position in the occupational structure of the working population of the urban areas.

As regards the female participation in the rural and urban areas separately in this industrial group to the respective rural and urban working populations, it is found more pronounced in the urban areas than in the rural areas as the proportion was 3.3 percent for the former and 0.6 percent for the latter.

Eastern Uttar Pradesh accounting for 20.9 percent of the total workers engaged in manufacturing industries other than the household industries of the state occupied a lower position as compared to other parts of this State. The District of Varanasi ranked at the first place in this region accounting for about one-fourth (Table VII-10) of workers of this region in this respect. The District of Gorakhpur ranked at the second place accounting for 12.70 percent of the total workers.

Table VII-10

Distribution of workers engaged in manufacturing, processing, servicing and repairs carried on other than Household Industry in Eastern Uttar Pradesh, 1971

Name of the District, Region, State	Size of workers	Proportion of region	Proportion of S.Sect.	Female workers per 1000 workers	Urban composition	Distribution by age-groups					
						0-14 yrs		15-59 yrs		60+ yrs	
						M	F	M	F	M	F
1. Bahraich	6,321	3.05	45.7	12	19	6.9	5.1	86.7	78.3	6.4	16.6
2. Gonda	9,705	4.70	36.5	51	85	3.8	10.7	91.2	84.8	6.0	4.5
3. Faizabad	12,432	6.00	29.6	49	69	2.6	8.3	91.8	83.9	6.6	7.8
4. Sultanpur	2,756	1.33	13.4	56	71	2.4	5.8	91.7	89.0	5.9	5.2
5. Pratapgarh	4,059	1.98	21.5	46	52	2.2	2.1	90.4	81.9	7.4	16.0
6. Basti	12,052	5.80	30.4	62	71	2.5	12.6	91.9	81.5	5.6	5.9
7. Gorakhpur	26,295	12.70	52.7	39	46	2.4	15.1	92.0	81.1	5.6	3.8
8. Deoria	13,165	6.40	42.6	31	46	2.2	15.0	91.9	79.4	5.9	5.6
9. Azamgarh	14,579	7.06	19.9	79	82	5.6	12.7	89.0	83.1	8.4	4.2
10. Jaunpur	11,484	5.55	34.6	72	89	4.3	8.9	90.3	84.9	5.4	6.2
11. Ballia	7,134	3.47	25.9	107	125	3.7	8.5	85.6	84.0	10.7	7.5
12. Ghazipur	7,684	3.70	26.0	183	229	4.1	4.0	87.9	91.0	8.0	5.0
13. Varanasi	51,173	24.80	32.0	32	39	7.4	7.7	87.3	84.0	5.3	8.3
14. Mirzapur	20,986	10.16	48.8	24	42	5.1	10.4	91.0	78.8	3.9	10.8
15. Allahabad	6,835	3.30	24.8	110	115	13.6	5.4	78.0	89.3	10.4	5.3
E.U.P.	206,660	100.0	32.5	52	71	4.9	9.2	89.0	84.4	6.1	6.4
U.P.	989,815			29	51	3.8	9.6	90.4	83.1	5.8	7.2

Source: Census of India, 1971, Series 21, Uttar Pradesh.

Among the other Districts figuring significantly were Mirzapur with 10.16 percent, Azamgarh with 7.06 percent, Deoria with 6.40 percent and Faizabad with 6.00 percent. The varying proportions of such workers of this region in its different Districts has been shown in the table VII-10.

The proportion of this sub-functional group to the total industrial sector varied from the maximum 52.7 percent in Gorakhpur District followed by that of Mirzapur with 48.8 percent, that of Bahraich with 45.7 percent etc. to the minimum of 13.4 percent in the District of Sultanpur. Among the occupational groups of the secondary sector this functional group is more pronounced in the Districts of Gorakhpur, Mirzapur and Bahraich while in other Districts the occupational group consisting of workers engaged in the household industries predominates. Therefore, among the activities of the secondary sector, the manufacturing, processing, servicing and repairing works other than the household industries occupy an important place in the urban functions performed by the urban centres. "Probably the most important premise relating to the urban economic base is that cities exist because within them are performed certain operations - industrial and commercial - primarily which result in the production, transfer, and distribution of goods and services for the population of the areas outside the cities".²

of the total workers engaged in this activity in this region, 41.3 percent worked in urban centres as against 25.2%

of the household industries. In this functional group there were 64.1 percent of the total urban workers of this State and hence their proportion in this region was much lower than that of the State. In the Districts of this region it varied considerably ranging from the maximum of 65.6 percent in Bahraich District followed by Mirzapur with 64.7 percent, Faizabad with 60.9 percent, Varanasi with 58.1 percent etc. to the minimum of 16.3 percent recorded by Basti District.

Another significant aspect of the distribution of these workers is their analysis into male and female workers. On an average there were 52 female workers per 1,000 workers in this region as against 29 female workers in the State of Uttar Pradesh. The rate of female participation in the labour force of this activity is much less than that of the household industries which had 163 female workers per thousand and workers in 1971. The ratio of female workers varied from the maximum of 183 per thousand workers recorded by the Ghazipur District to the minimum of 12 in Bahraich District. There exists a variation of still greater magnitude if the ratio of female workers in this functional group is taken into consideration by rural and urban areas of this region separately. It was 71 for the former and 26 for the latter. Thus the female participation rate is more pronounced in the rural areas than in the urban areas. In the rural areas this ratio (female participation) varied significantly from the highest of 229 per thousand workers in the District of Ghazipur to the minimum of 19 in the District of Bahraich. In the urban areas there exists a lesser amount of

variation in this respect ranging from the maximum of 69 per thousand workers in Azamgarh District ^{to the minimum} of 9 in Bahraich ^{District} again. The lower female participation rate in general in this region but comparatively higher in its rural areas than in its urban areas is due to the variation in the socio-economic and demographic factors in the different parts of this region and in its rural and urban functions. The nature of industrial production is also important because it determines the places of locations of such units.

The range of participation of different age groups depends much on the nature of the industry and on many other complex factors. The contribution made by the persons from the age groups of other than effective population age group constituted 11.5 percent of the total workers of this functional group as against 15.3 percent of the household industries and 8.5 percent of construction. These figures clearly indicate that the workers from such age groups constituted a lower proportion in this function than that found in the household industries but these maintained a higher proportion than that of construction. Children contributed 5.2 percent and old and retired persons 6.3 percent respectively in this activity. The composition of workers by age groups varied still further if the male and female workers were taken into consideration separately (Table VII-10).

The analysis of the distributional pattern of these workers at the tahsil level is essential in order to locate more precisely the places of concentration of functional ^{them} _~

activity in this region.

The manufacturing, processing, servicing and repairing activities carried on the basis of other than household industries occupied a unique place in the industrial economy of this region because of their wide importance as means of production. As regards the proportion of workers engaged in this activity to the total working population of the region it was 2.1 percent but for males and females separately it was 2.3 percent and 0.7 percent respectively. In fifty two out of 61 Tahsils comprising this region the proportion of workers was less than that in the household industries. Only nine Tahsils namely, Bahraich, Tarabganj, Faizabad, Basti, Gorakhpur, Pharenda, Maharajganj, Robertsganj and Dudhi figure prominently in this region by occupying a higher proportion of workers in this function^{al} group than in the household industries. The proportion of such workers varied more significantly from the maximum of 8.30 percent in Varanasi followed by Dudhi with 6.90 percent, and Gyanpur with 5.80 percent etc. to the minimum of 0.4 percent in Kadipur and Bansi each. Among other tahsils, only four with more than 4.00 percent of their respective working population figure eminently for this activity in the region and they are Mirzapur, Gorakhpur, Faizabad and Mohemmedabad. Out of seven tahsils having more than 4 percent of proportion, two i.e. Dudhi and Mirzapur are located in the Southern Uplands and four in the Doab, while Gorakhpur is a singular example from the Trans-Ghaghra sub-region. As regards their prominence in this industry it may be said that out of those seven tahsils, four

are District Headquarters wherein various types of facilities are easily available, while the other three are important for such activities due to other reasons. For example Dudhi Tahsil accommodates three important urban centres i.e. Pipri, Renukoot and Dudhi itself which are known for their industrial activities not only in this state but also all over the country. Gyanpur Tahsil has Bhadohi, Gopiganj and Gyanpur itself as urban centres. Out of which the former two are centres of carpet weaving activities which are known for their export and production. Mohemmedabad Tahsil has Maunath Bhanjan, Mubarakpur and Mohemmedabad itself as urban centres. Out of these the former two are renowned for their handloom cotton and silk textile units, the products of which find favourable markets all over this country. So all the Tahsils of this region have widely varying proportions of such workers. The areas of the respective proportional groups show a wide variation in coverage as is evident from the table VII-11. Eighteen tahsils ^{have proportions} below 1.0 percent, 27 tahsils ^{Tahsils} between 1.1 percent to 2.0 percent and 7 between 2.1 percent to 3.00 percent. Thus fifty two tahsils employed less than 3.0 percent of their respective working populations in the activities of manufacturing other than the household industries and nine tahsils show over 3.0 percent proportion of workers engaged in this function. Female ratio also varied from the maximum of 309 per 1000 workers in Saidpur Tahsil followed by Mohemmedabad Tahsil with 185, Ghosi Tahsil with 69 etc. to the minimum of 9 females Robertsganj tahsil. The female ratio is higher in this functional group in the Tahsils known for the

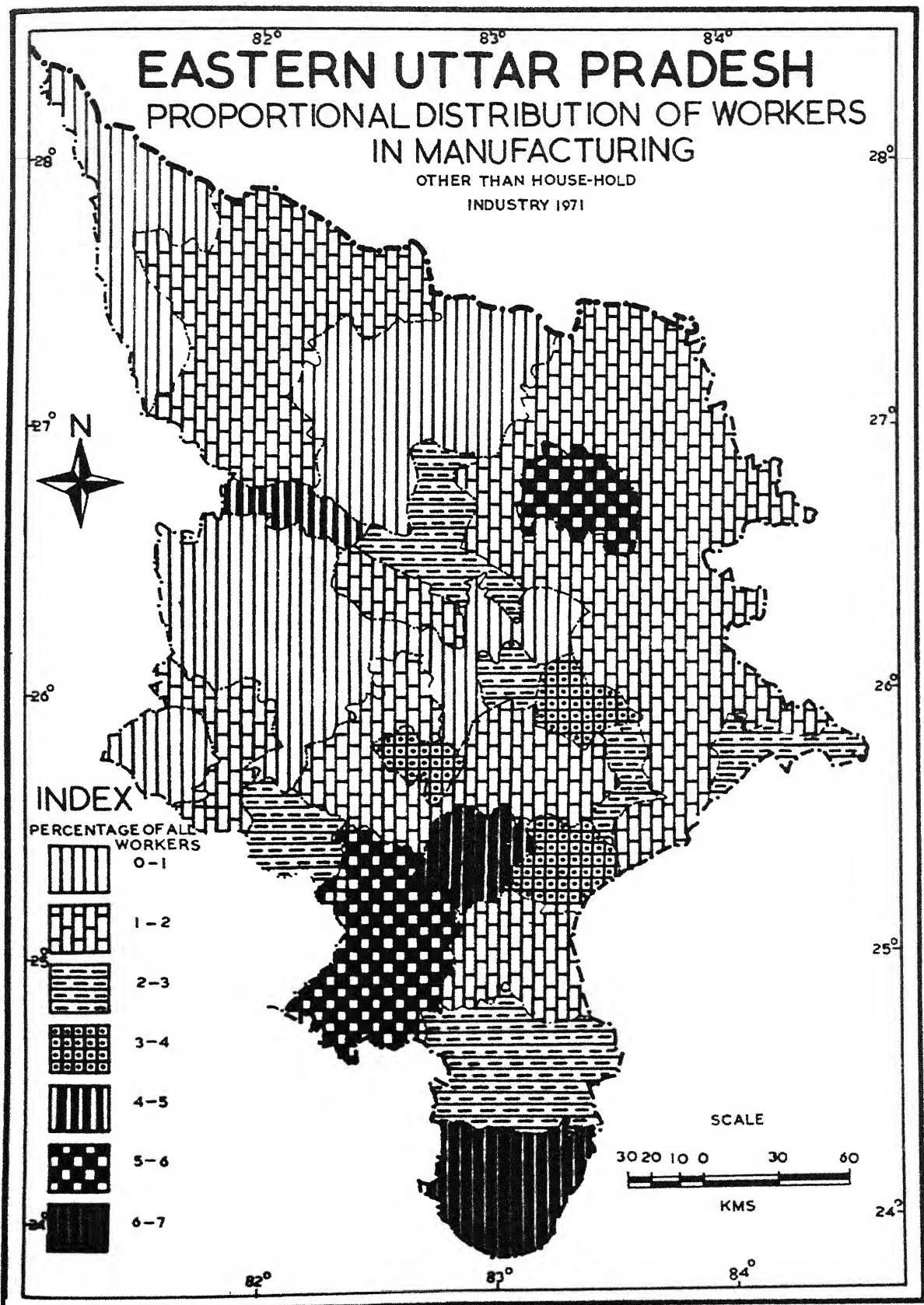
workers of the region and it ranked first followed by Gorakhpur Tahsil with 8.8 percent and Mirzapur Tahsil with 4.9 percent of such workers. These three tahsils together accounted for more than 31.00 percent of such workers and the number of such workers was more than 10,000 in each case.

Table VII-11

Frequency distribution of workers engaged in manufacturing other than Household Activities

Category	Range of proportion	Frequency of tahsils	Cumulative frequency of tahsils
<u>Workers</u>			
I	Upto 1.00 percent	18	18
II	From 1.1 to 2.00 percent	27	45
III	From 2.1 to 3.00 percent	7	52
IV	From 3.1 to 4.00 percent	3	55
V	From 4.1 to 5.00 percent	2	57
VI	From 5.1 to 6.00 percent	2	59
VII	From 6.1 to 7.00 percent	1	60
VIII	From 7.1 to 8.00 percent	nil	60
IX	Above 8.00 percent	1	61
<u>Female Workers per 1000workers</u>			
I	Upto 50	26	26
II	From 51 to 100	24	50
III	From 101 to 150	8	58
IV	From 151 to 200	2	60
V	From 201 to 250	nil	60
VI	From 251 to 300	nil	60
VII	Above 300	1	61

Four Tahsils namely, Gyanpur, Mohemmedabad, Faizabad and Chandauli had proportions ranging from 4.4 percent (in Gyanpur) to 2.7 percent (in Chandauli) and with absolute number of workers from 9,001 (in Gyanpur) to 5673 (in Chandauli).



FIGNO. 40

textile and other industries carried on in them on small scale basis while the lower proportion is noticed in the Tahsils known for their industrial activities on the large scale basis or they are more backward for female participation in the labour force due to social, religious or other causes. For example, Robertsganj and Dudhi are centres for large scale industrial establishments; while Bahraich and Nanpara are too backward for female participation in the labour force in general because of their social environments.

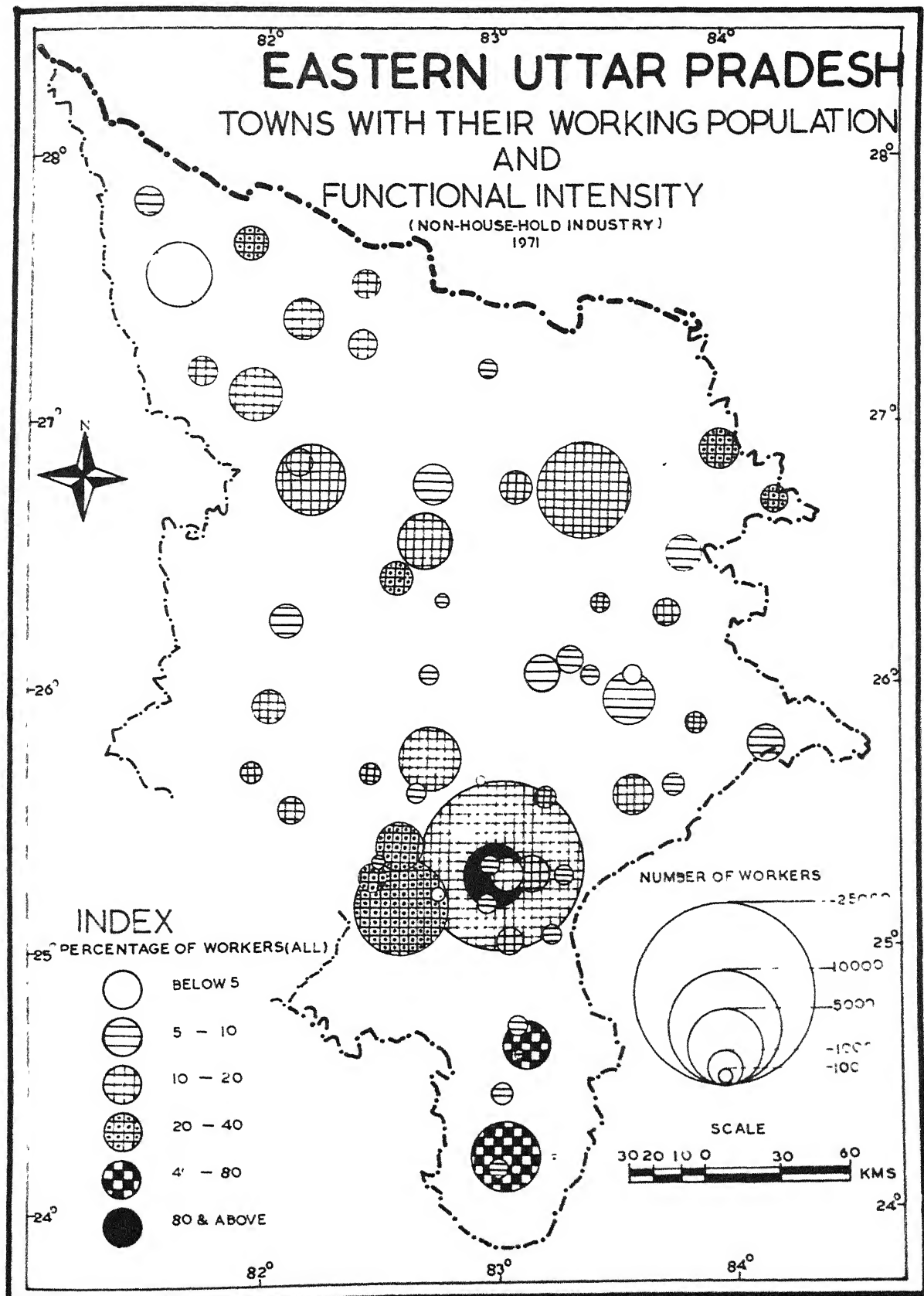
It is seen from the Table VII-11 that the female participation below 50 per 1000 workers was noticed in twenty six Tahsils, from 51 to 100 in twenty four Tahsils, from 101 to 150 in eight Tahsils and from 151 to 200 in two Tahsils. Only Saidpur Tahsil had above 300 workers. There was no tahsil having female workers from 201 to 300. Thus it can be said that the female participation ratio in this functional activity ranked much lower in almost all the Tahsils as was the trend in the region and the state. This comparison and contrast can be better explained and understood in the form of frequency distribution and cumulative frequency in case of the participation of workers and female workers separately (Table VII-11).

A significant aspect of the distribution of workers engaged in the manufacturing activities other than the household industries in the region is to show the size of such workers by Tahsils and rank them in order to indicate their position in the region. Varanasi Tahsil with 35,947 workers employed gainfully in this activity accounted for 17.40 percent of such

Similarly five Tahsils fell in the range from 4000 to 5000 workers with proportions from 2.4 percent (in Dudhi) to 2.05 percent (in Basti). Other tahsils in this range are Jaunpur, Bahraich and Padrauna respectively in order of size of such workers. The range from 3000 and 4000 workers was noted in seven tahsils with proportions from 1.9 percent (in Robertsganj) to 1.45 percent (in Bansgoan). Other tahsils falling in this range are Ballia, Tanda, Deoria, Balrampur and Khalilabad. Since this activity has urban orientation it would be in fitness of the things to analyse the distributional pattern of such workers engaged in the urban centres of this region.

7.8. Distribution of workers engaged in Manufacturing, Processing, Servicing and Repairing Works conducted on other than Household Industry in Urban Centres:

As a city grows in size, its activities become diversified. All large cities are more or less multifunctional in nature but the industrial sector constitutes a dominant portion of the economic base of many of these cities. The non-household industries of the urban centres of this region employed 13.7 percent of the total working population of this region in the industrial sector. The proportions of the labour force or the working population of the cities engaged in performing a particular activity are perhaps the best means of measuring the intensity of distribution of that activity. There are gradations in the proportion of the labour force engaged in performing the activities of the non-household industrial group in the urban centres of this region. This proportion varied from



FIGNO 41

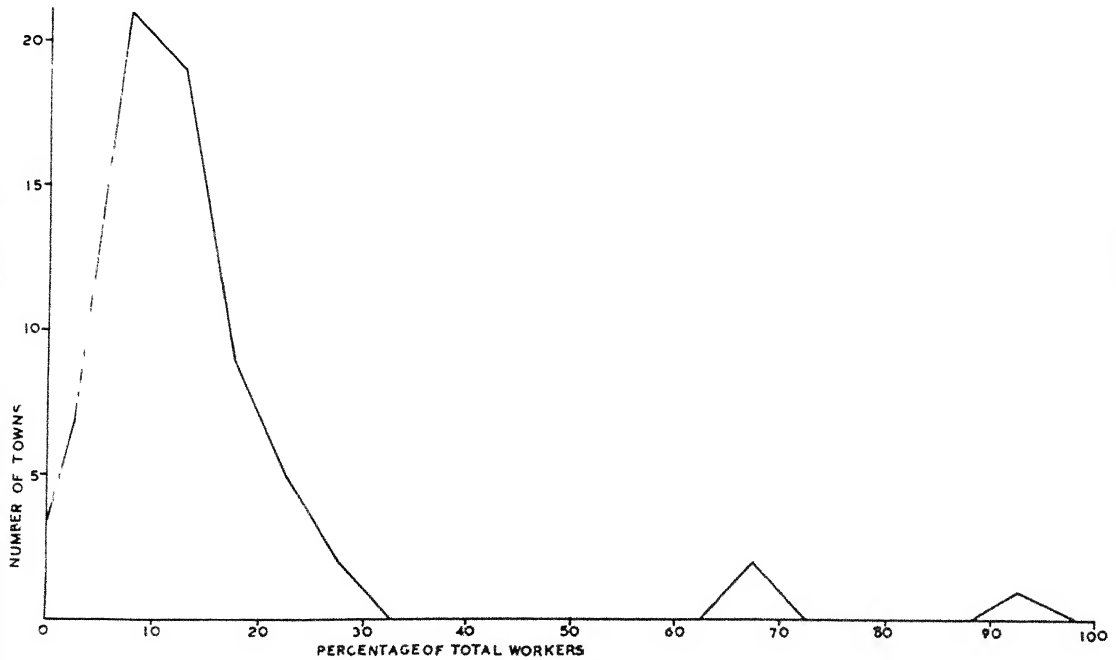
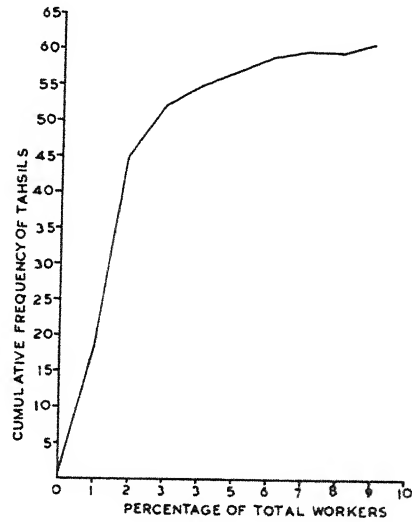
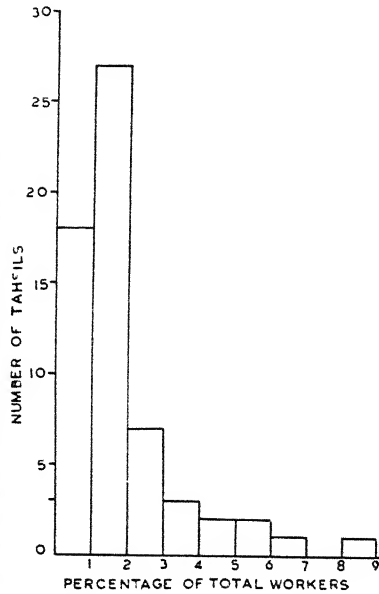
the maximum of 91.0 percent in Maruadih (Varanasi District) to the minimum of 0.2 percent in Reoti (Ballia District). Both the highest and lowest proportions are noted in the towns with more than 10,000 population. Among the urban centres in addition to Maruadih which are noted for markedly higher proportion of workers in this sub-functional group are Renukoot (69.5 percent) and Churk-Ghurma (68.8 percent). They originated with the establishment of large industrial units during the post independence period and later they developed the small scale and ancillary industrial units also. Therefore, the urban centres showing higher proportion are smaller in size and are mainly mono-functional for which they exist.

The proportion of workers of this region in this activity differs widely in the individual urban centres. However, it is better to rank them according to their size in respect of such workers. Varanasi ranks first in this respect followed by Gorakhpur, Mirzapur, Faizabad, Renukoot, Maruadih, Bahraich, Tanda, Maunath Bhanjan and Gonda. In order of the size of workers engaged in this activity Renukoot occupies fifth and Maruadih sixth rank whereas Churk-Ghurma has no rank within ten places. This is because the large urban centres are multi-functional and hence the proportion of their workers in a particular activity becomes lower, although the size of their total workers is larger. But as the smaller urban centres are mono-functional in character, hence they maintain higher proportion in a particular activity. Maruadih, Renukoot and Churk-Ghuma show functional intensity of specialisation in

EASTERN UTTAR PRADESH

TAHSILS & TOWNS WITH THEIR WORKERS ENGAGED IN OTHER THAN HOUSE-HOLD INDUSTRY

1971



FIGNO 42

non-household industries.

Table VII-12

Frequency distribution of proportion of workers engaged in
Non-household Industries

Category	Proportion of workers in urban centres	Frequency of urban centres	Cumulative frequency
I	10 percent and below	32	32
II	10.1 to 20 percent	25	57
III	20.1 to 30 percent	6	63
IV	30.1 to 40 percent	nil	63
V	40.1 to 50 percent	nil	63
VI	50.1 to 60 percent	nil	63
VII	60.1 to 70 percent	2	65
VIII	Above 90 percent	1	66

The above frequency distribution and its graphical representation (Fig.42) indicates that sixty three out of the total of sixty six urban centres recorded the lower proportion of workers than 30 percent in this activity, while the remaining three centres maintained more than 60 percent of their total labour force engaged in this functional activity. There was no urban centre having its proportion between 30 and 60 percent. This points out that these urban centres recorded either a lower or a higher proportion but they did not range in between. Nearly half of the urban centres had less than 10 percent of the proportion of the labour force engaged in this activity.

It is not only the number of workers engaged in a particular activity which matters much but the sex composition of these workers is also important. The number of female workers per 1000 workers engaged in this function, show all

shades ranging from the maximum of 235 in Mohemmadabad (Azamgarh) to the minimum of less than 1 in Renukoot (Mirzapur). Besides there are urban centres with no female worker participating in this activity. This is because the units engaged in manufacturing on the non-household basis do not employ female workers except a few. Therefore, the urban centres having such industrial units show almost nil or nil female participation.

Industrially, Eastern Uttar Pradesh is a very less developed region of the country. Its industrial structure is largely dominated by the village and cottage industries carried on household basis. The most important industry in the large organised sector in this region is the sugar industry. Others worth mentioning are the textiles, engineering and chemical industries which have led to the development of several other industries of minor importance.

The household industries dominate over the non-household industries in this region. Efforts should be made to set a balance between these two to strengthen the industrial structure and set up. However, the development of industries carried on the non-household industries basis for large scale production should not be slackened because they also vitalise this region's economy to a great extent. Since the population is quite large in this region and so if the industries are not well developed here, it will depress the economy which will cause serious imbalances in the social and material aspects. For a balanced development of economy, capital intensive large scale industries should also be established at many places in this region.

7.9. Construction:

The functional category of construction is quite comprehensive in meaning and scope and it consists of numerous activities associated with the construction and maintenance works such as those of buildings, roads, railways, telegraph and telephone lines, water ways and water reservoirs, hydroelectric stations, allied aspects of industrial plants and other buildings (such as plumbing, heating, air conditioning and setting of tiles, marbles, bricks etc.) and electrical installations etc. Among the occupational groups of secondary sector, this functional group of workers engaged in the economic activities of construction and maintenance constitutes the smallest component. For the first time the workers of this functional group were treated independently under a separate industrial category at 1961 census when they numbered 45,834 persons and constituted only 0.4 percent of the labour force of this region. The size of such workers decreased to 29,696 persons at 1971 census and it constituted a nominal proportion of 0.3 percent only as compared to 0.6 percent for this State.

Out of this number 28,812 were males and 884 were females. Therefore, the females participation was at the rate of 30 females per 1000 workers in this functional group ~~percent~~ as against 163 in the case of household industries and 52 in the case of non-household industries. This functional group has its own importance as the activities of this category are very useful to the society and the nation. It provides houses to the people ranging from the humblest straw huts of the

savage to the most elaborate modern buildings of the cities and from the sparsely located huts to the compact dwellings in the biggest and densest aggregations of the human settlements. The means of transport and communications, the electrical and air conditioning installations, the sanitary fittings etc. always accompany these settlements particularly in the urban areas.

7.10. Distribution of Workers Engaged in Construction:

The decrease in the numerical strength of the workers engaged in this function categories in 1971 below the figures of 1961 was mainly due to the stricter definition of 'worker' adopted at 1971 census. Like the workers engaged in other functions, the distribution of such workers also showed an uneven distribution by Districts. The variation of its proportion ranged from the maximum of 0.8 percent in Varanasi District to the minimum of 0.1 percent in Pratapgarh and Basti Districts. But these proportions figures fail to provide a clear idea in respect of the absolute labour force engaged in this function in the Districts. Therefore, the proportion of labour force of the region engaged in construction by districts is perhaps the best means of measuring the distribution of that activity and based on such figures (Table VII-13). Hence we may rank the Districts in order of the size of workers in them which showed their importance in respect of that function. The District of Varanasi with its maximum numerical strength ranked first and accounted for 22.6 percent of the labour force engaged in the activity of construction in this region. It is

Table VII-13

Distribution of workers engaged in construction in
Eastern Uttar Pradesh, 1971

Name of the District, Region, State	Size of workers	Proportion of region	Proportion of Ind. Sect.	Female workers per 1000 workers		Urban composition	Age composition of workers			
				Total	Rural		0-14 yrs		60+ yrs	
							M	F		M
1. Bahraich	1,659	5.6	12.1	26	55	6	2.1	nil	7.5	nil
2. Gonda	2,316	7.8	8.7	4	2	7	1.1	2.3	5.1	2.3
3. Faizabad	1,735	5.8	4.2	5	3	9	0.4	22.2	6.0	11.1
4. Sultanpur	848	2.8	4.1	90	118	nil	2.2	2.6	6.8	6.5
5. Pratapgarh	557	1.9	1.4	13	15	6	1.3	nil	6.9	14.3
6. Basti	1,112	3.7	2.8	38	50	12	4.1	11.6	6.0	7.0
7. Gorakhpur	2,964	10.0	5.9	20	26	6	3.1	5.0	4.9	nil
8. Deoria	2,715	9.2	8.9	59	74	2	2.2	12.3	3.5	1.8
9. Azamgarh	1,631	5.5	2.3	44	60	17	2.2	4.2	6.1	20.8
10. Jaunpur	1,569	5.4	4.8	12	21	3	2.5	nil	6.7	nil
11. Ballia	1,294	4.4	4.7	6	5	10	2.6	nil	7.5	12.5
12. Ghazipur	1,361	4.6	4.7	208	277	3	2.0	nil	5.5	16.2
13. Varanasi	6,710	22.6	4.2	10	10	9	3.5	3.0	6.4	6.0
14. Mirzapur	2,405	8.1	5.6	6	9	4	1.5	nil	4.6	nil
15. Allahabad	789	2.6	2.9	11	10	31	4.1	33.3	14.6	11.1
E.U.P.	29,696	100.0	4.7	30	43	7	2.4	4.6	5.9	9.2
U.P.	166,561			16	21	11	2.0	6.5	6.8	7.8

Source: Census of India, 1971, Series 21, Uttar Pradesh.

followed in order of the size of workers in this function by the Districts of Gorakhpur (10.0 percent), Deoria (9.2 percent), Mirzapur (8.1 percent), Gonda (7.8 percent) and Faizabad (5.8 percent).

On the whole 4.7 percent of the labour force of the secondary sector was employed in constructional work in this region but this proportion varied widely ranging from the maximum of 12.1 percent in District to the minimum of 1.4 percent in Pratapgarh District. These proportional figures indicate the comparative significance of this activity among the functions of the secondary sector in this region.

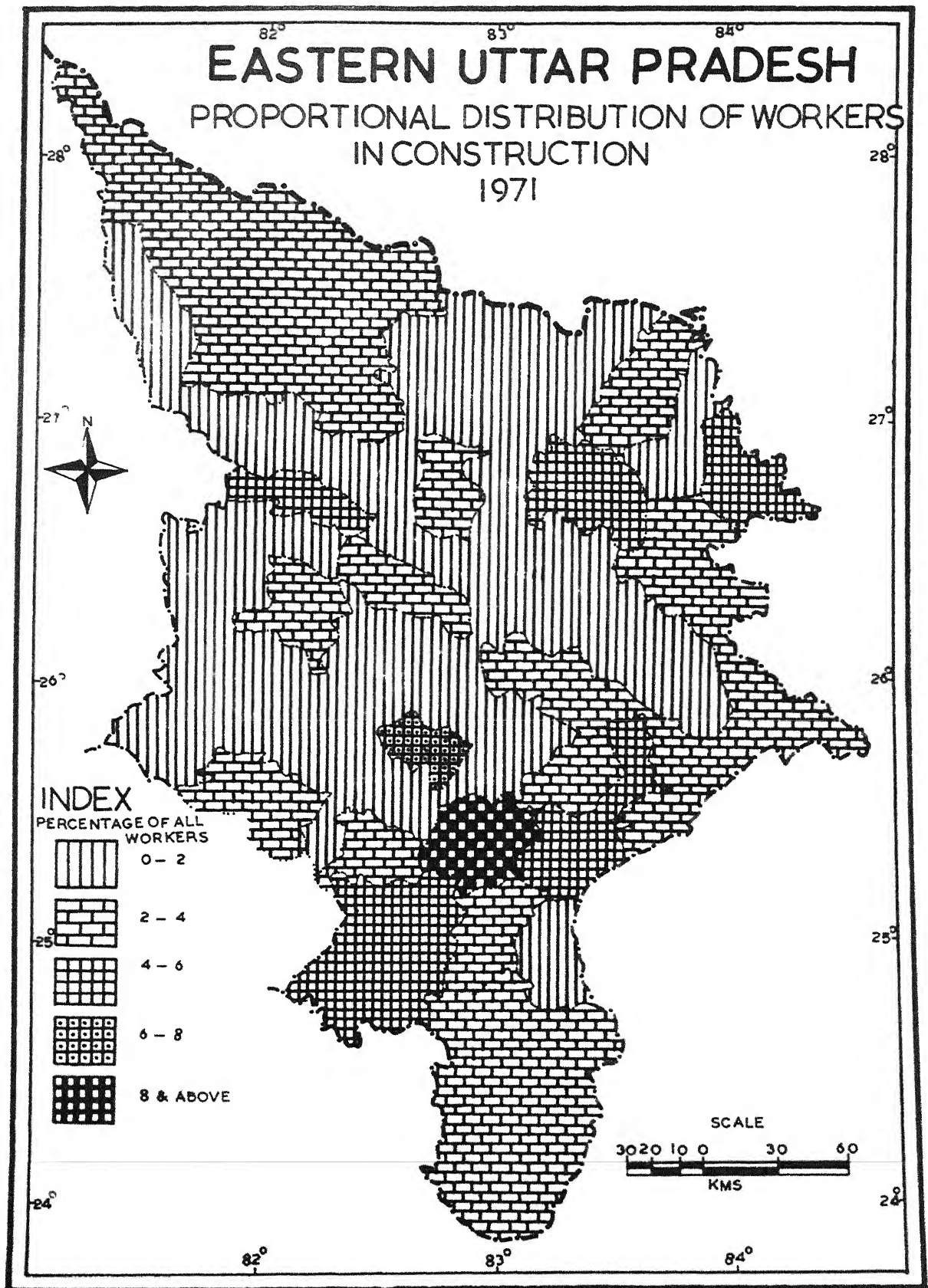
As compared to the State of Uttar Pradesh the proportion of workers working in this function in the urban areas is lower in this region and it varied considerably among the Districts of this region also. The maximum proportion of 59.2 percent was noticed in the District of Mirzapur while the lowest of 21.2 percent was found in Deoria District. Figures for other Districts can be seen from the table VII-13.

The distribution of workers by age-groups is very significant. The children in the age-group of 0 to 14 years constituted 2.4 percent of males and 4.6 percent of females while the persons in the age-groups of 60 years and above formed 5.9 percent of the former and 9.2 percent of the latter. The majority of workers in this case also came from the effective population age-group. In some of the Districts such as Bahraich, Jaunpur and Mirzapur no female worker participated

from the age-groups other than the effective population age-group (from 15 to 59 years). In case of male workers, children as well as old and retired persons also joined the labour force of this function in large numbers, although in varying proportion in the Districts of this region. Among the male workers the contribution of the persons belonging to the age-group of 0 to 14 years varied from the maximum of 4.1 percent in Basti District to the minimum of 0.4 percent in Faizabad District while in the age group of 60 years and above the highest of 7.5 percent was found in the Districts of Ballia and Sahraich and the lowest of 3.5 percent in Deoria District. The participation of old and retired persons was more pronounced than the children.

The ratio of female workers stood at 30 in total, 43 in rural and 7 in urban labour force of this function in this region as compared to 16, 21 and 11 female workers per 1000 workers respectively in this State. This shows that as compared to this State, the female participation within this region was more pronounced and it was more pronounced in its rural areas also but it was comparatively lower in urban areas.

In case of rural areas of this region the maximum number of female workers i.e. 277 per 1000 workers was noted in Ghazipur District while the minimum^{of} 2 was found in Gonda District and in the case of urban areas it ranged from 17 in Azamgarh District to 2 in Deoria District. This variation is seen because of the fact that the female participation in the labour force depends on many factors of complex nature e.g.



FIGNO. 43

socio-economic, demographic, religious etc. which create fluctuations in the Districts of the region.

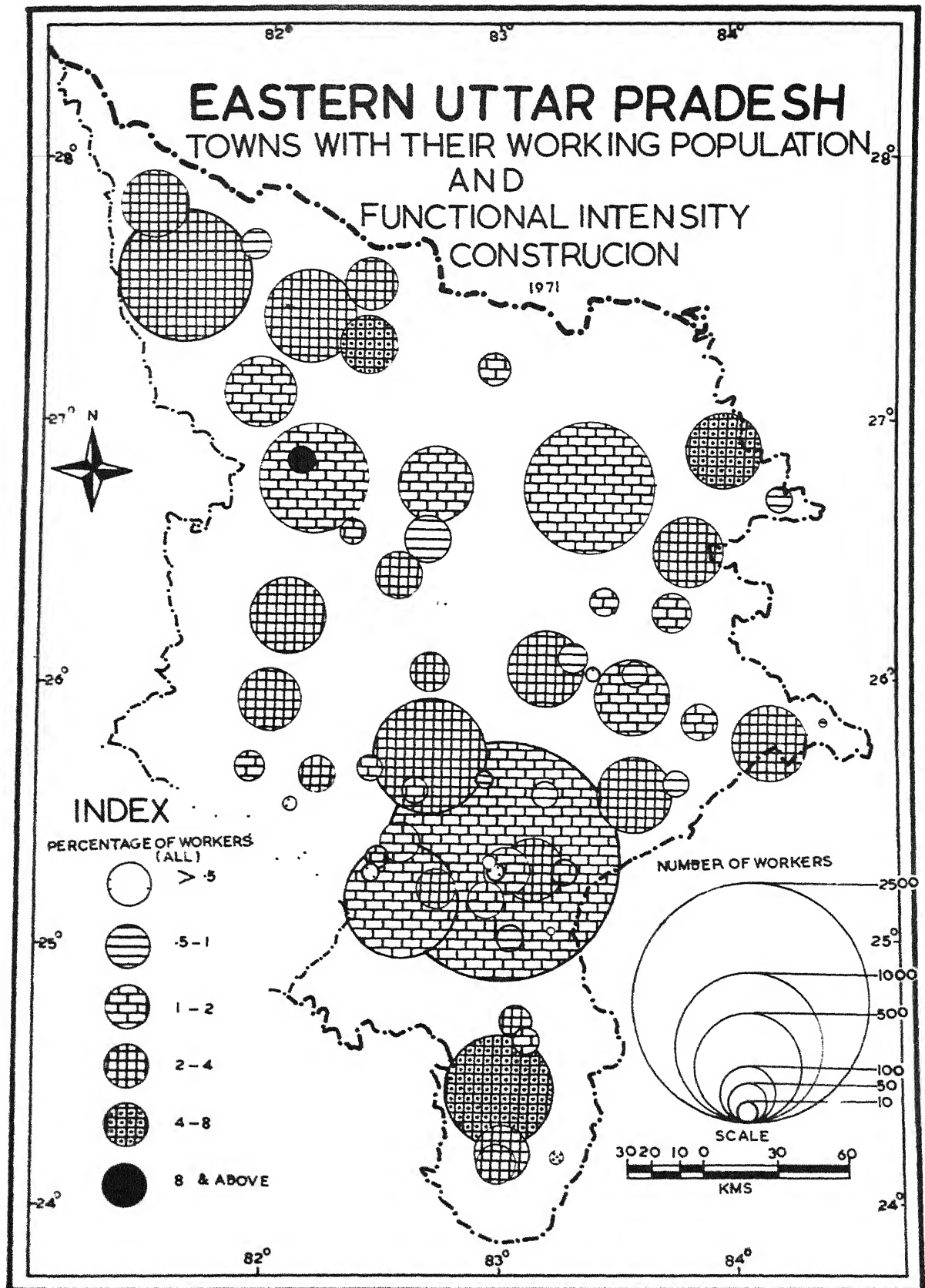
Although the workers engaged in construction constitute a small proportion of the total working population yet they are quite useful and play a significant role in the society because they are engaged in construction of buildings and the maintenance of roads etc. in rural as well as urban areas of this region. Their distribution varied quite significantly from the maximum of 1.16 percent in Varanasi Tahsil to the minimum of 0.94 percent in Kaiserganj and Amethi Tahsils. This proportion is in ratio to the total working population of the respective tahsils. To have a comprehensive idea about varying proportions of such workers in the tahsils it would be worthwhile to categorise them into groups based on their differentials at the interval of 0.2 percent. (Table VII-14).

As many as twenty nine tahsils fell under the proportion upto 0.2 percent and twenty four tahsils ranged their proportion from 0.21 to 0.40 percent while only six tahsils ranged their ratio from 0.41 and 0.60 percent. Jaunpur and Varanasi Tahsils stand as sole representative of their own group. The areas covered by each group of tahsils have been shown in Fig. 43.

Varanasi Tahsil ~~of~~ this reigns supreme in the region and ranks first, accounting for 16.9 percent of the labour force of this region engaged in this activity followed by tahsils of Gorakhpur with 6.1 percent, Mirzapur with 4.2 percent;

Chandauli with 3.6 percent and Bahraich with 3.2 percent etc. Thus it is quite evident that although this activity is wide spread in this region yet there are only few places of concentration.

The study of the distribution of workers would not be complete unless we analyse their sex composition because it is also an important aspect of their distribution. In some of the activities such as construction of buildings and the allied functions female workers actively participate but in those activities which require hard manual labour or skilled or semi-skilled labour they do not participate. Therefore in the tahsils where such activities as Sanitary fittings, electrical or air conditioning installations and the allied functions are performed, the female participation is almost nil or negligible. Hence the ratio of female participation is much dependent on the type of functions to be performed. Thus it is the nature of the activity also in addition to the socio-economic and demographic conditions which plays a significant role in respect of female participation. At the Tahsil level, the proportion of female workers per 1000 workers ranged from the maximum number of 594 in Saidpur to the minimum number of 2 in Akbarpur and Balrampur. There were seven Tahsils namely, Kaiserganj, Tarabganj, Amethi, Patti, Bansi, Shahganj and Jaunpur where female's participation in this labour force was nil. The number of female workers has been shown inflated because the proportion of participation has been calculated per 1000 workers, whereas only a very few female workers participate in the labour force engaged in construction.



FIGNO. 4 4

Table VII-14

Frequency distribution of workers engaged in construction at
Tahsil level

Category	Range of proportion of workers	Frequency of tahsils	Cumulative frequency
I	0.20 percent & below	29	29
II	0.21 to 0.40 percent	24	53
III	0.41 to 0.60 percent	6	59
IV	0.61 to 0.80 percent	1	60
V	0.81 to 1.00 percent	nil	60
VI	1.01 to 1.20 percent	1	61

The above frequency distribution and its graphical representation (Fig.45) is quite significant and meaningful in the sense that ^{they bring home the} facts about the distribution of workers in proportion to the total working population at the tahsil level. The proportion of in this occupational group also varies significantly in urban centres because the economic activity of this category shows a high degree of concentration.

7.11. Distribution of workers engaged in the activity of construction in the urban centres:

The urban centres of this region varying themselves in size engaged the varying proportions of workers in the activities of construction. However, the size of the workers alone does not determine the proportion. The ratio of the size of workers to the total labour force of an urban centre determines its proportion of workers engaged in this function. A big city is multifunctional and hence despite the large size of its workers in a particular function as compared to other urban centres, it may not maintain a higher proportion. For example,

EASTERN UTTAR PRADESH TAHSILS & TOWNS WITH THEIR WORKERS ENGAGED IN CONSTRUCTION 1971

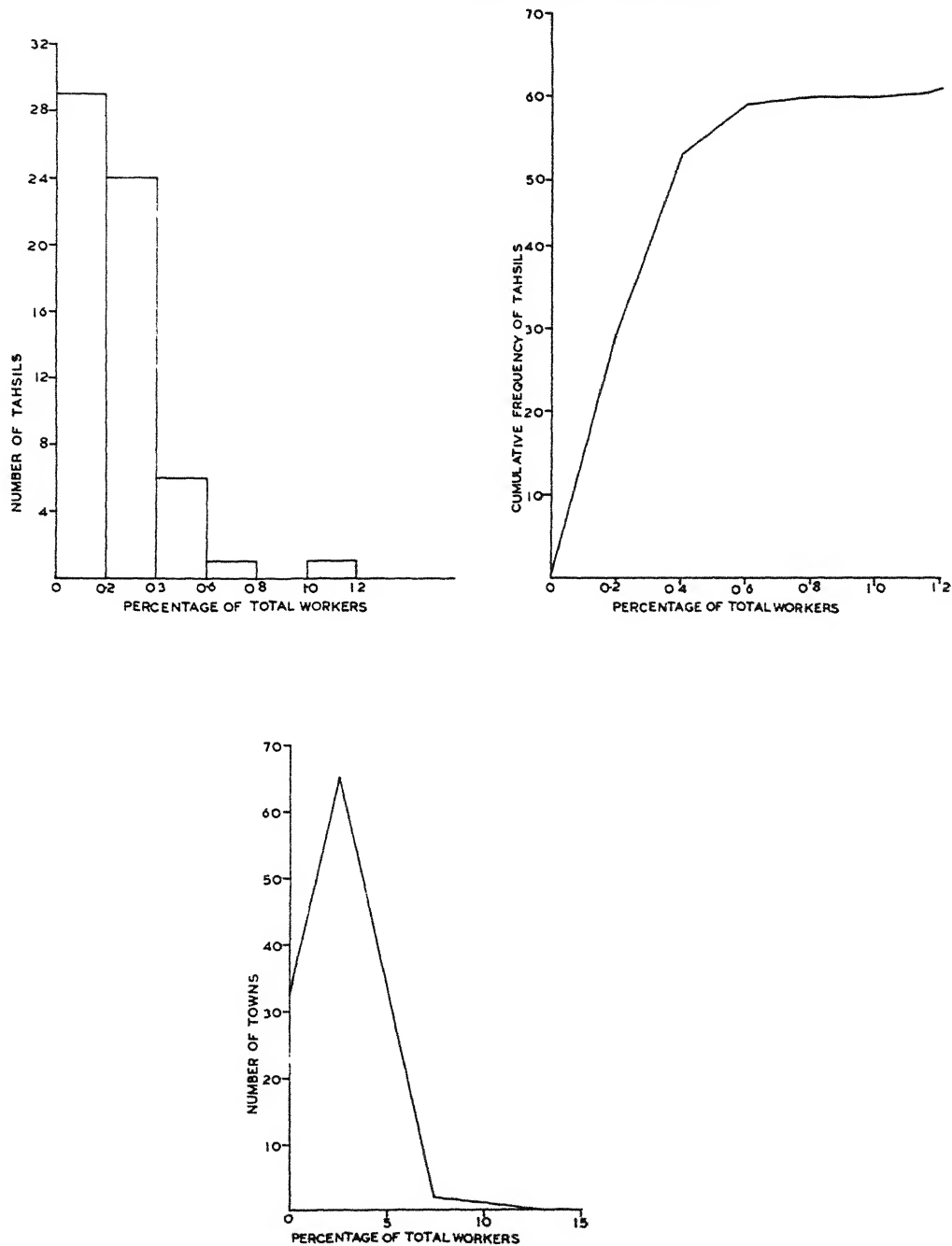


FIG NO 45

Varanasi is the largest city of this region, but despite its rank being first in this activity in this region as it accounted for 23.6 percent of the workers of this region engaged in this function, it recorded as low as 1.6 percent of its total working population in this function. The proportion of such workers varied widely ranging from the maximum of 7.5 percent in Obra to the minimum of 0.10 percent in Chakia. There were two urban centres namely, Chopan and Markundi which had no worker engaged in the activities of construction according to 1971 census.

Table VII-15

Frequency distribution of workers engaged in construction in urban centres

Category	Range of proportion of workers	Frequency of tahsils	Cumulative frequency
I	1.0 percent & below	21	21
II	1.1 to 2.0 percent	23	44
III	2.1 to 3.0 percent	11	55
IV	3.1 to 4.0 percent	6	61
V	4.1 to 5.0 percent	2	63
VI	5.1 to 6.0 percent	-	63
VII	6.1 to 7.0 percent	nil	63
VIII	7.1 to 8.0 percent	1	64

It is already said that the proportion of such workers is more in urban areas than in rural areas in this region. However, no urban centre of this region shows a large proportion. The urban centres, according to the size of workers performing this activity in them, may be ranked in order to show their regional importance in this function. The city of Varanasi (2622) again ranks first followed by Gorakhpur (796) and Bahraich (754) which have second and third places. Mirzapur (582)

has fourth and Jaunpur (574) has fifth place. According to the size of such workers generally the District headquarters being also the urban centres rank high in the region. It is seen that larger the city or urban centre, more the activities of construction done there. It is quite surprising that Obra Town with maximum proportion of such workers of its working population stood very low among the towns of this region in regional importance on the basis of size of workers engaged in this function. Therefore, the size of a city or town matters much in this respect because the increase in its size usually introduces the diversification of economic activities requiring more employment which in turn implies lesser degree of functional intensity of specialization.

The smaller proportion of workers engaged in the construction activities indicates the backward economy and the lower standard of living of the people of this region. A quite small proportion of labour force engaged in this region in constructional activities shows the poverty of the people of this region who have lower per capita income as compared to this State. Absence of such activities in a particular region is also indicative of the poor resources and the poorer utilisation of existing resources of constructional activities. The efforts made under the Five Year Plans have certainly brought some fruitful results in this respect but they have not developed much the activities of construction. But some increase in the size of man power engaged in performing the activities of construction in this region has helped the economy of the region

to make a headway. The economic development of a region can be measured to a large extent by the proportion of its working force engaged in the activities of construction.

The poor performance of the secondary sector on the whole has already depressed the economy of the region affecting adversely the occupational structure of the people living in the region. The development of industries naturally involves the development of the activities of construction. The economic development of this region depends much on the efforts to accelerate the growth of the household industries and those of the large scale and small scale industries along with the activities of construction which may decrease the pressure of manpower on agricultural and other allied activities of the primary sector and may absorb many persons of unskilled, skilled and semi-skilled categories engaged in this region hitherto in the activities of primary sector. Without this shift neither the activities of primary sector nor the activities of industrial sector will improve and this would mean a stagnant economy which will drag down the economic development of this region and also ^{of} this State.

Therefore, to improve the economic structure of the region, the activities of Primary Sector and those of the Industrial or Secondary Sector should be so developed as to strike the required balance between these two sectors and also between the labour intensive household industries and the capital intensive non-household industries. The progressive development of industrial sector accompanied with the improvements in

agriculture should go together to improve the lot of the people living in this region where man-power is surplus in agriculture and the industrial sector is not well developed to absorb all that surplus manpower.

REFERENCE

1. Van Royen, Neils, A. Bergston, Donald, J., Patton and Water Deshler "Fundamentals of Economic Geography", Fifth Edition, 1973: Chapter XXVIII: 'Nature and Geographic Distribution of Major Manufacturing Industries", p. 515.
2. Mayer and Kohn "Readings in Urban Geography" Edited. Ed. 1967, Section 4: "The Economic Base of Cities", p.85.

CHAPTER VIII

DISTRIBUTION OF WORKING POPULATION GAINFULLY
ENGAGED IN OCCUPATIONS OR ECONOMIC ACTIVITIES OF
TERTIARY SECTOR

CHAPTER VIIIDISTRIBUTION OF WORKING POPULATION GAINFULLY ENGAGED IN
OCCUPATIONS OR ECONOMIC ACTIVITIES OF THE TERTIARY SECTOR8.1. General:

Tertiary sector, often called as service sector, plays a pivotal role and occupies a significant place in the occupational structure of population in the rich and developed countries in comparison to the backward and underdeveloped countries. In some of the developed countries of the world, more than 40 percent of the labour force is engaged in the activities of this sector followed closely by the industrial or secondary sector and then by primary or the agricultural and allied sector. Therefore, the rising size of workers engaged in this sector indicates that the development processes are taking place in the region or the country and it is in fact a barometer measuring the stage of economic development. Eastern Uttar Pradesh is a predominantly agricultural region wherein this sector occupies the second place with 9.4 percent of its working population engaged in the activities of tertiary sector as per census of 1971 as against 14.1 percent of U.P. and 16.7 percent of India. The smaller proportion of the labour force performing the functions of the Tertiary sector in this region shows the existing poor economic conditions as compared to this state and the country. However, even this smaller proportion has its own importance in the occupational structure of this region because of the nature of functions it consists of and the

gradually rising size and proportion of labour force engaged in this sector. The Tertiary Sector consists of a number of functions such as trade, commerce, transport, communications, banking and government and non-government services etc. Workers engaged in this sector have been enumerated differently at different censuses*. The scheme of their classification in the Tertiary Sector in 1971 census was almost the same as in 1961 census, which was, however, a bit different in 1951 census. Here an attempt has been made to present a comparison and contrast of the number of such workers at these census, although the figure for 1951 is not strictly comparable with those of 1961 and 1971. Even the figures for 1961 and 1971 have no reasonable comparison because of the definitional change of word 'worker'. At 1961 and followed in 1971 census the workers of this sector constituted the following occupation groups: (a) Trade and Commerce (VII); (b) Transport, storage and communication (VIII); and (c) Other services (IX).

8.2. Distribution of workers engaged in the occupations of Tertiary Sector:

Eastern Uttar Pradesh recorded as many as 1,108,523 persons performing the activities of the Tertiary Sector which

* At 1951 census: the Tertiary Sector formed the part of 'Non-Agricultural classes' and was treated under three broad occupational groups: (vi) commerce; (vii) Transport and (viii) other services and miscellaneous services. At 1961 and 1971 censuses: This sector was grouped into three functional groups: (a) Trade and commerce (VII); (b) Transport, Storage and Communications (VIII); and (c) Other services (IX).

accounted for about 10 percent of the total working population of this region in 1951 as compared to 15.6 percent of U.P. and 17.7 percent of India. The strength declined to 980,137 persons in 1961 and to 917,465 persons in 1971 accounting for 8.7 percent and 9.4 percent respectively of the total labour force of this region as against 14.5 percent and 14.1 percent for U.P. and 16 percent and 16.7 percent for the country. At all these censuses the proportion of labour force engaged in this sector in this region had been smaller as compared to the state and the country.

When we compare the proportions of labour force engaged in Tertiary sector of this region we find that it declined from 10.00 percent in 1951 to 8.7 percent in 1961 denoting a fall of 1.3 percent which is higher than that of 1.1 percent of U.P. but lower than that of 1.7 percent of India. The amount of variation in the proportion shows both positive and negative fluctuations. Following the general trend of the region, the State and the country, thirteen Districts of this region were noted for negative variation ranging from the maximum of 4.3 percent in Allahabad District to the minimum of 0.5 percent in Sultanpur District, while the remaining two Districts of Bahraich and Deoria witnessed positive variations of 0.5 and 0.7 percent respectively. The Districts with positive variations are situated in the Trans-Ghaghra sub-region which have opposite trend than the general negative trend witnessed in this region, this State as well as this country (Table VIII-1).

Table VIII-1

Distribution of workers engaged in Tertiary or service sector by occupational groups in proportion to the total working population of the region
1951-1971

Name of the District, Region, State	Distribution of labour force by occupational groups of tertiary sector														
	1951					1961					1971		Proportion variation		
	VI	VII	VIII	Total	VII	VIII	IX	Total	VII	VIII	IX	Total	51-61	61-71	51-71
1. Bahraich	2.1	0.4	4.3	6.8	2.2	0.4	4.3	6.9	2.1	0.3	3.9	6.3	+0.1	-0.6	-0.5
2. Gonda	2.3	0.5	6.3	9.1	2.3	0.7	4.2	7.2	2.2	0.7	3.6	6.5	-1.9	-0.7	-2.6
3. Faizabad	2.6	0.6	6.4	9.6	2.6	0.7	5.4	8.7	3.0	0.9	5.6	9.5	-0.9	+0.8	-0.1
4. Sultanpur	1.8	0.2	5.8	7.8	2.2	0.5	4.6	7.3	2.4	0.4	4.8	7.6	-0.5	+0.3	-0.2
5. Pratapgarh	2.1	0.4	5.6	8.1	2.1	0.7	4.0	6.8	2.4	0.4	5.0	7.8	-1.3	+1.0	-0.3
6. Basti	1.7	0.2	4.2	6.1	1.6	0.2	2.3	4.1	2.0	0.3	3.0	5.3	-2.0	+1.2	-0.8
7. Gorakhpur	2.1	1.0	5.8	8.9	2.2	1.5	4.9	8.6	2.8	2.3	4.9	10.0	-0.3	+1.4	+1.1
8. Deoria	1.2	0.2	2.7	4.1	1.4	0.4	3.0	4.8	1.9	0.4	4.5	6.8	+0.7	+2.0	+2.7
9. Azamgarh	2.4	0.4	5.9	8.7	2.4	0.6	4.3	7.3	2.6	0.4	5.2	8.2	-1.4	+0.9	-0.5
10. Jaunpur	3.1	0.8	6.2	10.1	2.7	0.7	4.3	7.7	3.8	0.8	5.3	9.9	-2.4	+2.2	-0.2
11. Ballia	4.5	0.8	10.8	16.1	3.7	0.8	8.8	13.3	3.4	0.7	6.7	10.8	-2.8	-2.5	-5.8
12. Ghazipur	3.5	0.9	9.5	13.9	2.9	0.7	7.7	11.3	3.1	0.5	7.2	10.8	-2.6	-0.5	-3.1
13. Varanasi	6.3	2.6	14.1	23.0	6.3	3.4	11.3	21.0	6.6	3.6	11.4	21.6	-2.0	+0.6	-1.4
14. Mirzapur	4.2	1.5	8.3	14.0	3.2	1.8	7.7	12.7	3.2	1.1	7.3	11.6	-1.3	-0.9	-2.2
15. Allahabad	1.9	0.6	9.0	11.5	1.9	0.8	4.5	7.2	2.2	0.5	5.7	8.4	-4.3	+1.2	-3.1
E.U.P.	2.7	0.7	6.6	10.0	2.6	0.9	5.2	8.7	2.9	1.0	5.5	9.4	-1.3	+0.7	-0.6
U.P.	3.9	1.1	10.6	15.6	3.7	1.4	9.4	14.5	4.1	1.7	8.3	14.1	-1.1	-0.4	-1.5
India				17.7				16.0				16.7	-1.7	+0.7	-1.0

It is worth while to notice that the situation changed during the period 1961-71 because the proportion rose from 8.7 percent in 1961 to 9.4 percent in 1971 for this region showing an increase of 0.7 percent in 1971 over that of 1961. But this was not the position in all the Districts of this region. The negative variations were noted in the Districts of Bahraich, Gonda, Ballia, Ghazipur and Mirzapur, ranging from the maximum of 2.5 percent in Ballia District to the minimum of 0.5 percent in Ghazipur District. The other Districts of this region followed the general trend witnessed in the region and showed positive variations ranging from the maximum of 2.2 percent in Jaunpur District to the minimum of 0.6 percent in Varanasi District. It may be seen that both the maximum and minimum positive and negative variations were witnessed in the Doab sub-region and they were confined to the four Districts of the Varanasi Division only.

The distribution of the labour force engaged in the Tertiary Sector by the Districts of this region (Table VIII-1) clearly points out that Varanasi District is very important in the region as it recorded 23.00 percent of its total working population engaged in the functions of the Tertiary Sector in 1951 which, however, dropped to 21.00 percent in 1961 but rose to 21.6 percent in 1971. The proportion in the District of Varanasi is higher because of a number of factors responsible for its industrialisation, increasing urbanisation, and developing activities of transport and commerce. Among the other Districts of this region which figure eminently in respect of

the proportion of labour force gainfully employed in the functions of the Tertiary Sector are those of Mirzapur, Ballia and Ghazipur because they always ranked higher than the remaining Districts of the region, although not in the same order as it was interchanged among them. For example, in 1951 and 1961 the District of Varanasi was followed by those of Ballia, Mirzapur and Ghazipur in that order but in 1971 Mirzapur occupied the second place in order followed by Ballia and Ghazipur in the third and fourth places respectively. It is quite interesting to note that the variations of significance having high proportions in respect of the Service Sector were noted among the four Districts of the Varanasi Division only. Much of the variation in the proportions during the period 1951-71 was due to the definitional changes of the term 'worker' adopted at different censuses. It was not due to the fact that a large number of workers became out of employment or shifted to some other occupation. According to 1971 census the maximum proportion of persons employed in the Service Sector was 21.6 percent in Varanasi District and the lowest was 5.3 percent in Basti District. A glance at the table VIII-1 will point out that in general the proportion of such workers was lower in the Trans-Ghaghra sub-region and in the western part of the Doab sub-region but it increased towards the south and the east where places of concentration were found in the District of Varanasi followed by Mirzapur. It would be significant to analyse the distribution of labour force engaged in the Tertiary Sector of this region by occupational groups because such an

analysis will clearly point out the comparative sizes of the functional groups constituting the labour force of this sector. The functional category noted as 'other services' had always been the largest functional group, followed by the category known as 'Trade and commerce', while the occupational group engaged in 'Transport, storage and communications' formed the smallest group. For example, in 1971 out of 9.4 percent of the total working population of this region engaged in Tertiary Sector, 'the other services' group accounted for 5.5 percent followed by 2.9 percent engaged in Trade and commerce and the rest 1.0 percent in Transport, storage and communications. As compared to these proportions, 8.3 percent, 4.1 percent and 1.7 percent respectively were recorded by the State of Uttar Pradesh. These proportions prove that the region of Eastern Uttar Pradesh lags far behind this State as a whole in respect of the labour force engaged in the functional categories of the Tertiary Sector.

Another valid and significant aspect of the distribution of such labour force is its division into male and female workers classified by their age-groups.

8.3. Distribution of workers classified by sex and their Age-groups:

In 1971, there were in all 91,7065 persons engaged in this sector and they accounted for 9.4 percent of the total working population of this region. Out of this, the males numbered 859,342 and females 57,723 and thus their ratio was

93.7 percent for the former and 6.3 percent for the latter. As regards the proportions of male and female workers separately to their respective male and female working populations of the region, it was 10.25 percent in the case of former and 4.1 percent in the case of the latter (Table VIII-2). At the District level variations of still greater significance are noted. In the case of male workers the proportion ranged from the maximum of 23.3 percent in the District of Varanasi followed by the District of Mirzapur with 12.7 percent to the minimum of 4.1 percent in the District of Sultanpur, while it varied from the highest of 9.55 percent in Varanasi District followed by Ghazipur District with 6.5 percent to the lowest of 1.9 percent in Basti District in the case of female workers.

The female participation in the labour force engaged in the Tertiary Sector in 1971 came to about 63 female workers per 1000 workers for this region on an average as against 53 for Uttar Pradesh. There was a marked variation as the number of female workers varied ranging from the maximum of 112 in the District of Ghazipur to the minimum of 48 in Bahraich District. But the number of female workers varied much significantly by occupational groups. For example, the number of female workers per 1000 workers on the average worked out to be the maximum of 85 under the functional category 'other services' followed by 39 in case of 'Trade and Commerce' and 10 in case of transport, storage and communications. The ratio of the female workers by occupational groups is much dependent on the nature of economic activities or functions to be performed as well as on socio-

Table VIII-2

Sex composition by occupational groups of Tertiary sector, 1971

Name of the District, Region, State	Proportion of male & female work- ing population engaged in				Proportion engaged in service sector		No. of female workers per 1000 workers		Total Tertiary sector	
	VII		VIII		M	F	VII	VIII		
	M	F	M	F						
										IX
1. Bahraich	2.15	0.70	0.3	N	3.85	5.2	17	03	64	48
2. Gonda	2.4	0.7	0.8	0.1	3.6	3.2	32	11	83	58
3. Faizabad	3.3	0.9	1.0	0.1	6.0	3.3	40	12	80	61
4. Sultanpur	2.7	0.75	0.5	0.05	5.2	3.0	46	16	94	75
5. Pratapgarh	2.9	0.6	0.5	N	5.7	2.3	48	05	88	71
6. Basti	2.2	0.6	0.4	N	3.2	1.3	42	05	61	50
7. Gorakhpur	3.2	0.5	2.7	0.1	5.3	2.6	31	08	82	51
8. Deoria	2.1	0.35	0.45	N	4.8	2.5	23	05	69	52
9. Azamgarh	3.0	0.8	0.5	0.2	5.7	2.9	49	07	93	75
10. Jaunpur	4.3	1.15	0.9	0.05	5.6	3.3	43	09	87	64
11. Ballia	3.8	0.9	0.8	0.1	7.3	3.4	44	08	79	64
12. Ghazipur	3.5	1.1	0.6	0.1	7.6	5.3	77	37	134	112
13. Varanasi	7.3	1.6	4.1	0.35	11.9	7.7	31	12	88	58
14. Mirzapur	3.8	0.76	1.3	0.04	8.4	3.1	50	07	87	69
15. Allahabad	2.6	0.5	0.6	N	6.5	2.1	42	09	73	59
E.U.P.	3.3	0.8	1.1	0.1	5.85	3.2	39	10	85	63
U.P.	4.4	0.9	1.9	0.2	8.5	6.2	22	11	76	53

N = stands for negligible proportion

economic and demographic conditions prevailing in the region. Most of the occupations under this sector perform specialised functions and hence need persons of particular qualifications regarding education and training. In the absence of suitable facilities for education and training of females in particular trades, their proportion was lower in this sector. The resistance of females to join the labour force has also contributed much towards the lower participation ratio of female workers in the region.

A very low female participation rate in the labour force employed in this sector is a unique feature of the distribution of workers in this region as well as in its Districts. The participation rate of 63 female workers on an average per 1000 workers in this sector is much below the figure 143 which is the general participation rate of female workers in the total working population of this region and is also much less than 154 of the Primary Sector and 121 of the Secondary Sector in this region. The low female participation rate in various sectors indicates that usually the females do not prefer to join occupations, especially that of the Tertiary Sector. The lowest participation rate is noticed in the functional category of 'Transport, Storage and Communications' which requires persons capable of doing hard manual labour and the clerical and accounting work in the offices. Therefore, the persons of sound physique with proper education and training are preferred and in this respect the female candidates fail to compete with their male counter parts because of their

multifarious activities at the home front in addition to so many other factors which are also responsible for their marginal contribution towards the activities of the tertiary sector. It is mainly because of the nature of occupation that the range of variations is more pronounced in certain functional groups. The females' participation is much dependent upon the nature of services to be performed and this is why they join more in case of 'other services' and quite less in case of the occupation connected with 'Transport, Storage and Communications'.

An analysis of male and female workers under different age groups constituting the labour force employed in the activities of the Tertiary Sector is more meaningful. The participation of the persons from the non-effective population age groups depends much on the nature of the particular occupation and the socio-economic conditions of the people of the region. Since the nature of the occupations differs, so there are variations in the proportion of the working population engaged in this sector under its different functional groups. Of the total workers engaged in the various functions of the Tertiary Sector of this region, as many as 21,445 were below the age of 14 years while 60,881 were 60 years and more in age, and the rest belonged to the effective population age group having the range from 15 to 59 years. Thus the children, and old and retired persons accounted for 2.3 percent and 6.6 percent respectively of the labour force employed in this sector, while the persons from the effective age-group (15-59) made the major contribution of 91.1 percent. As compared to other sectors,

the contribution made by the persons from the age groups other than the effective population age-group towards the activities of this sector is the lowest as the workers of the age-groups upto 14 years, and at and above the age of 60 years constituted 4.9 percent and 9.8 percent in the Primary Sector, and 5.9 percent and 7.8 percent in the Secondary Sector in this region.

The contributions made by persons of different age groups also show much variations at the District level (Table VIII-3). The proportions of effective population age group (15 to 59 years) ranged from the maximum of 93.5 percent in Gorakhpur District to the minimum of 88.7 percent in Ghazipur District. The contribution made by the persons of the age group upto 14 years is although quite low, yet is of much importance in the region. It ranged from the maximum of 3.5 percent in the District of Ghazipur to the minimum of 1.5 percent in Sultanpur and Gorakhpur Districts. In the case of workers under the age group (60^{years} and above) the proportion ranged from the maximum 7.8 percent in Ghazipur and Ballia Districts to the minimum of 4.9 percent in the District of Deoria.

There are variations of greater magnitude if we consider the proportions of the workers by their occupational groups separately as divided into their age groups. The contribution of the workers upto the age of 14 years constituted 2.8 percent in case of 'other services' followed by 2.00 percent in 'trade and commerce' and 0.8 percent in 'transport, storeage and communication'. The proportion of the persons in the age group of 60 and above years was 10.1 percent in 'trade and commerce'

Table VIII-3

Distribution of workers under different age groups
1971

Name of the District, Region, State	Contribution made by the persons				Contribution by persons of different age groups by occupational groups									Female age groups		
	0-14 15-59 60+ Total				60+ yrs									0-14 15-59 60+		
					15-59			60+ yrs								
	VII	VIII	IX		VII	VIII	IX	VII	VIII	IX						
1. Bahraich	3.0	90.6	6.4	9.4	2.3	1.4	3.5	88.7	94.7	91.3	9.0	3.9	5.2	6.0	86.9	7.1
2. Gonda	2.4	91.4	6.2	8.6	1.9	0.7	3.0	88.6	96.9	92.0	9.5	2.4	5.0	8.6	83.4	8.0
3. Faizabad	1.7	91.8	6.5	8.2	1.8	0.6	1.8	87.6	95.4	93.4	10.6	4.0	4.8	13.0	78.0	9.0
4. Sultanpur	1.5	92.2	6.3	7.8	1.2	0.5	1.7	89.1	96.3	93.3	9.7	3.2	5.0	18.5	70.2	11.3
5. Pratapgarh	1.9	91.6	6.5	8.4	1.8	0.5	2.1	88.2	95.6	92.8	10.0	3.9	5.1	19.1	73.3	7.6
6. Basti	1.6	92.4	6.0	7.6	1.9	0.8	1.6	88.2	96.6	94.7	9.9	2.6	3.7	7.3	84.8	7.9
7. Gorakhpur	1.5	93.5	5.0	6.5	1.3	0.6	2.0	89.7	97.6	93.7	9.0	1.8	4.3	10.1	82.5	7.4
8. Deoria	2.4	92.7	4.9	7.3	2.6	0.7	2.5	88.9	96.8	93.1	8.5	2.5	3.6	12.3	81.5	6.5
9. Azamgarh	2.8	90.7	6.5	9.3	2.6	0.6	3.0	87.3	94.2	92.1	10.1	5.2	4.9	13.9	78.5	7.6
10. Jaunpur	1.7	92.2	6.1	7.8	1.9	0.4	1.7	89.3	95.9	93.8	8.8	3.7	4.5	13.4	78.7	7.9
11. Ballia	2.3	89.9	7.8	10.1	2.6	0.6	2.2	85.5	94.6	91.8	11.9	4.8	6.0	13.1	80.9	6.0
12. Ghazipur	3.5	88.7	7.8	11.3	1.8	3.9	4.2	85.8	92.3	89.7	12.4	3.8	6.1	29.8	63.1	7.1
13. Varanasi	2.5	90.3	7.5	9.7	1.8	0.6	3.4	88.2	95.3	90.1	10.0	4.1	6.5	8.8	83.5	7.7
14. Mirzapur	2.9	90.1	7.0	9.9	1.7	1.0	3.7	87.7	95.4	90.3	10.6	3.6	6.0	19.0	71.3	9.6
15. Allahabad*	4.4	84.3	11.3	15.7	4.0	2.4	5.1	79.0	86.8	85.0	17.0	8.8	9.9	1.8	93.0	5.2
E.U.P.	2.3	91.4	6.6	8.9	2.0	0.8	2.8	87.9	95.7	91.9	10.1	3.5	5.3	12.6	79.7	7.7
U.P.	2.1	91.0	6.9	9.0	1.8	1.4	2.4	87.4	93.5	92.5	10.8	5.1	5.4	9.5	84.4	6.1

* Allahabad means the entire district of Allahabad.

Note: Calculations are based on (i) Census of India 1971, Series 21, Uttar Pradesh.
(ii) Districts Census Handbook, 1971

followed by 5.3 percent in 'other services' and 3.5 percent in 'transport, storage and communications'. These figures clearly point out that the lowest participation of persons from both the age-groups other than the effective population age-group was recorded in the functional group of workers engaged in the activities of transport, storage and communications. The contribution of the persons from the effective age-group of 15 to 59 years constituted the proportion of 95.7 percent in the VIII occupational category followed by 91.9 percent in the IX and by 87.9 percent in the VII functional categories of workers under this sector. The contributions of the workers from the age groups of children, and old and retired persons was found maximum in the case of 'trade and commerce' followed by 'other services' and 'transport, storage and communications'.

It is now worthwhile to consider the female participation under different age groups of workers employed in this sector. In Eastern Uttar Pradesh out of a total of 21,445 persons in the age group of 0 to 14 years, the female workers constituted 12.6 percent as against 9.5 percent in this state as a whole. The percentage in this region varied from the maximum of 29.8 in the District of Ghazipur to the minimum of 6.0 in Bahraich District. In the case of workers in the age group of 60 years and above, the females constituted 7.7 percent as against 6.1 percent in this state and their proportion varied from the maximum of 11.3 percent in Sultanpur District to the minimum of 6.0 percent in Ballia District. The remaining workers belonged to the effective age group ranging from 15 to

59 years of age. Therefore, the female participation is more pronounced in the early age when the female workers are free to join the labour force. But it is less pronounced in the advanced age group when the females find little time for outside work as they are mostly engaged in domestic affairs and also develop more disabilities at the advanced age. Among the female workers, the major contribution of 79.7 percent is recorded by the age group of 15 to 59 years which varied widely from the maximum of 86.9 percent in Bahraich District to the minimum of 63.1 percent in Ghazipur District. As against 79.7 percent the average for the region, the average for this state was 84.4 percent in this respect.

8.4. Distribution of workers by rural and urban areas:

The occupations of Tertiary Sector are more concentrated in the urban areas than in the rural areas. The urban centres specialise in certain occupationals and so they rank high in those occupations showing their regional importance. Table VIII-4 provides the details of workers by rural and urban areas at the districts level in this region.

As compared to the urban proportion of 30.9 percent of workers engaged in the functions of the Secondary Sector, the functions of the Tertiary Sector accounted for 38.7 percent of the labour force living in urban centres of this region. But this proportion is much less than 54.3 percent recorded by the state of Uttar Pradesh as a whole. The urban composition of labour force engaged in the functions of the Tertiary Sector

Table VIII-4

Distribution of workers by rural and urban areas engaged in the occupational group of Tertiary Sector, 1971

Name of the District, Region, State	Distribution of workers by rural and urban areas										
	Urban composition				VII. Trade and commerce						
	VIII IX Total				Rural			Urban			
	P	M	F		P	M	F	P	M	F	
	2	3	4	5	6	7	8	9	10	11	
1. Bahraich	53.4	71.0	34.9	43.3	1.0	1.0	0.4	23.8	24.5	7.9	
2. Gonda	47.0	54.7	39.8	43.8	1.2	1.3	0.5	22.7	23.7	10.1	
3. Faizabad	52.6	47.7	45.4	47.9	1.5	1.7	0.5	18.0	18.8	8.4	
4. Sultanpur	26.8	31.2	12.7	18.0	1.8	2.0	0.6	35.9	37.2	15.0	
5. Pratapgarh	27.2	27.5	11.7	17.3	1.8	2.7	0.5	35.7	37.6	13.7	
6. Basti	24.8	25.2	21.5	22.6	1.5	1.7	0.5	23.2	24.2	10.1	
7. Gorakhpur	43.2	70.4	40.1	48.1	1.7	2.0	0.3	18.8	19.3	10.1	
8. Deoria	34.8	26.7	15.2	21.3	1.3	1.4	0.3	25.0	26.8	8.4	
9. Azamgarh	31.3	25.7	15.2	23.2	1.9	2.1	0.6	13.6	17.0	2.3	
10. Jaunpur	47.8	35.8	25.4	34.8	2.1	2.3	0.9	29.7	31.0	9.5	
11. Ballia	30.2	16.5	19.7	22.8	2.5	2.8	0.8	23.8	25.3	8.2	
12. Ghazipur	32.1	27.2	16.5	21.5	2.2	2.5	1.05	26.0	27.2	8.7	
13. Varanasi	76.3	72.8	51.1	62.4	2.1	2.3	0.6	20.9	21.8	8.6	
14. Mirzapur	67.3	62.4	45.4	53.0	1.15	1.4	0.4	19.4	20.0	11.3	
15. Allahabad*	12.1	9.0	3.9	6.4	2.0	2.2	0.4	19.5	20.9	6.0	
E.U.P.	46.6	58.1	31.0	38.7	1.7	1.8	0.5	21.3	22.5	5.4	
U.P.	62.1	75.6	46.1	54.3	1.8	1.9	0.5	20.1	20.8	6.9	

Contd.

Table VIII-4 (Contd.)

Name of the District, Region, State	Distribution of workers by rural and urban areas											
	III. Transport, Storage communication						V. Other services					
	Rural			Urban			Rural			Urban		
	P	M	F	P	M	F	P	M	F	P	M	F
1	12	13	14	15	16	17	18	19	20	21	22	23
1. Bahraich	0.1	0.09	N	4.3	4.5	N	2.7	2.7	2.5	28.5	26.8	62.3
2. Gonda	0.35	0.4	N	8.9	9.3	2.6	2.2	2.3	1.7	31.2	29.4	55.6
3. Faizabad	0.5	0.6	0.05	4.9	5.3	0.5	3.4	3.6	1.7	29.6	29.1	36.2
4. Sultanpur	0.3	0.35	0.04	7.4	7.9	0.6	4.3	4.6	2.5	34.4	32.2	70.4
5. Pratapgarh	0.3	0.4	0.01	6.6	7.2	0.15	4.5	5.2	1.8	31.8	29.6	56.8
6. Basti	0.2	0.3	0.01	3.8	4.0	0.06	2.4	2.6	0.9	30.1	29.5	38.5
7. Gorakhpur	0.7	0.9	0.02	25.7	26.9	4.7	3.1	3.5	1.3	30.6	28.9	60.6
8. Deoria	0.3	0.4	0.01	4.3	4.35	0.6	4.0	4.3	2.0	26.2	23.6	50.6
9. Azamgarh	0.3	0.4	0.02	1.7	2.3	nil	3.5	4.8	2.6	16.6	19.6	6.8
10. Jaunpur	0.5	0.6	0.04	4.4	4.7	0.2	4.2	4.9	2.3	21.9	20.6	40.8
11. Ballia	0.6	0.7	0.02	2.6	2.7	0.4	5.6	6.2	2.8	31.0	31.2	29.5
12. Ghazipur	0.4	0.45	0.1	3.6	3.8	0.09	6.3	6.6	4.8	31.2	30.2	45.8
13. Varanasi	1.3	1.5	0.01	11.0	11.6	2.3	7.3	8.1	2.7	24.2	22.8	45.7
14. Mirzapur	0.45	0.6	N	6.1	6.5	4.9	4.5	5.3	1.9	30.4	29.5	42.8
15. Allahabad*	0.5	0.6	0.15	3.5	3.7	1.2	5.5	6.4	2.1	16.3	16.7	11.9
E.U.P.	0.4	0.5	0.03	8.8	9.5	0.9	4.0	4.4	2.1	26.7	25.8	34.0
U.P.	0.5	0.53	0.03	10.4	10.9	2.5	5.1	5.3	3.0	30.4	29.1	54.6

* Figures for Allahabad stand for the part of Allahabad.

varied significantly from the maximum of 62.4 percent in the District of Varanasi followed by that of Mirzapur with 53.0 percent to the minimum of 17.3 percent in Pratapgarh District. The lowest urban composition of 6.4 percent was in fact noted in the case of Allahabad District, but it represented only three contiguous Tahsils of this District lying in the Gangapar area which alone constituted the part of Eastern Uttar Pradesh. Hence it does not hold good for the whole of this District. The rural-urban composition of the labour force constituting the functional groups of this sector was not the same in all categories but it varied widely depending on the distribution of these activities in the rural and urban areas of this region. It is quite revealing to note that the urban composition of workers engaged in 'trade and commerce' was 46.6 percent in 'transport, storage and communications' was 58.1 percent and in 'other services' was 31.0 percent in this region as compared to 62.1 percent, 75.6 percent and 46.1 percent respectively for this state. The lower urban composition of workers in the Tertiary Sector is due to the fact that this region is quite less urbanised. This composition varied more in the occupational groups at the district level.

Another significant aspect is to study and analyse the distribution of workers (males and females) classified into those of rural and urban areas by occupational groups as proportions of the respective rural and urban working populations of this region. In the rural areas, 'trade and commerce' constituted 1.7 percent, 'transport, storage and communications'

0.4 percent and 'other services' 4.0 percent of the total rural working population of the region, while in the case of urban working population they constituted 21.3 percent, 8.8 percent and 26.7 percent respectively. The proportion of labour force engaged in the occupations of the Tertiary Sector in the rural and urban areas of this region separately shows the concentration of such workers in the urban centres and this indicates the predominant urban character of the functions of this sector.

As usual in the rural as well as in the urban areas of this region also male workers outnumbered female workers in a big way in all the functional groups. In the rural working population, the male workers constituted 1.8 percent in 'trade and commerce', 0.5 percent in 'transport, storage and communications' and 4.4 percent in 'other services' as compared to their 22.5 percent, 9.5 percent and 25.8 percent proportions respectively in the urban working population of the region. This shows that as compared to the rural areas the proportion of male workers engaged in the occupations of the Tertiary Sector in the urban areas formed much larger proportion. The female participation in the rural areas was 0.5 percent in 'trade and commerce', 0.03 percent in 'transport, storage and communications' and 2.1 percent in 'other services' as compared to their proportions of 5.4 percent, 0.9 percent and 34.0 percent respectively in their urban working population of the region. The female participation in the functions of the Tertiary Sector is also more pronounced in the urban areas. So the proportions of both male and female workers under this sector are more pronounced

in the urban areas of Eastern Uttar Pradesh. Their proportions by occupational groups in the rural and urban working populations separately showed variations of still greater magnitude. As regards the female participation, the 'other services' occupational category shows the maximum concentration in urban areas followed by 'trade and commerce' and then by 'transport, storage and communications'. The minimum female participation was noted in the last occupational category 'transport, storage and communications' because of the nature of its activities which are usually not suitable for the female workers. But the female participation is more pronounced in the rural as well as urban areas in case of the 'other services' wherein it constituted 2.1 percent in the rural and 34.0 percent in the urban areas, than in 'trade and commerce' in which the rate of female participation was 0.5 percent in the rural and 5.4 percent in the urban areas. This reveals the variations in the sex composition of workers.

Now it is worthwhile to study and analyse the pattern of distribution of workers by occupational groups at the District, Tahsil and individual urban centre level.

8.5. Trade and Commerce:

The trade and commerce is a wide term and it consists of the inland as well as foreign trade and commerce including whole sale and retail trade and the activities associated with restaurants and hotels. Further details of such activities have been provided in Appendix A1. Thus the occupation of trade and

commerce is associated with all types of functions performed for wholesale and retail shopping and running of restaurants and hotels either inside this country or abroad. Thus the distribution of workers in this category is quite beneficial in assessing the economic development of the region as a whole and also in its administrative divisions.

8.6. Distribution of Workers Engaged in Trade and Commerce:

Since the economic activities of trade and commerce form an important function, hence the size of workers engaged in them, their distribution, sex composition, age group analysis and division by rural and urban areas in the region and at its District and Tahsil levels are also very significant. The workers in this functional group numbered as 295,093 in 1951 but it fell to 293,049 in 1961, and further to 285,156 in 1971. Thus a continuous fall in the size of these workers was noted during the post independence period, although there has been a large increase in the size of trade and commerce in this period because of the manifold activities of development undertaken in the public as well as in the private sectors of economic in this region, the State and the country. The fall in number of these workers does not indicate that many of them became out of employment. In fact this was due to a definitional change of the term 'worker' adopted at these censuses. Despite the continuous fall in the size of these workers, their proportion to the total working population constituted 2.7 percent in 1951, 2.6 percent in 1961 and 2.9 percent in 1971 as against 3.9 percent,

3.7 percent and 4.1 percent respectively for this state (Table VIII-1). The last proportion of the region or the State showed a rise rather than a fall, contrary to the trend shown by the absolute number of workers.

The distribution of workers engaged in trade and commerce and their proportion to the total labour force at the District level indicates that despite a general fall in the size of this occupational group in this region many of its Districts were noted for positive variation. These positive variations are attributed to the development of economic activities associated with trade and commerce in those Districts, while the negative variations are mainly attributed to the definitional change of the term 'worker' due to which most of the part-time workers engaged in the activities of trade and commerce at the census of 1951 could not be included in this category of workers at censuses of 1961 and 1971.

In 1961 the Districts of Bahraich, Gonda, Sultanpur, Pratapgarh, Gorakhpur, Deoria, Azamgarh, Varanasi and Allahabad recorded increase in the size of workers of this occupational group over the figures of 1951, while all other Districts followed the general trend of the region showing a fall during this period. Among the Districts having increase in the absolute number of workers engaged in this function, the Districts of Bahraich, Sultanpur, Gorakhpur and Deoria alone could show also an increase in their proportion total. This means during the period between 1951 and 1961 the activities of trade and commerce could get more momentum in some of the backward Districts of

the region only. In this respect the period from 1961 to 1971 is quite distinct because it although noted fall in the absolute number of workers yet it recorded a rise in their proportion to the total labour force in the region. As regards the size of workers performing this function, the Districts of Faizabad, Basti, Gorakhpur, Deoria and Jaunpur noted an increase in 1971 over the figures of 1961, while all other Districts recorded a fall in the number of such workers. But on the other hand as many as fourteen Districts of this region showed an increase in their proportion.

It is significant to note that the Districts taken separately recorded both positive as well as negative variations during the post-independence period. The maximum positive variation was witnessed in the District of Gorakhpur where the number of workers was 22,917 in this functional group in 1951 which rose to 24,550 in 1961 and then to 27,395 in 1971. It indicated a continuous increase in the proportion of workers from 2.1 percent in 1951 to 2.2 percent in 1961 and then to 2.8 percent in 1971. As regards the increase in the size of this functional group, the District of Gorakhpur was followed by those of Deoria, Sultanpur, Basti and Varanasi respectively. During the period, Varanasi District noted the minimum increase of 399 persons only in 1971 over the figure of 1951. Among the Districts showing a fall in proportion of workers Ballia figured eminently where the size of workers engaged in this function was 20,327 in 1951 which fell to 18,105 in 1961 and further to 14,918 in 1971, showing a regular fall in their proportion to

the total labour force from 4.5 percent in 1951 to 3.7 percent in 1961 and then to 3.4 percent in 1971. However, at 1971 census the proportion of such workers ranged from 6.6 percent in Varanasi District to 1.8 percent in Deoria District. This shows a greater magnitude of variation at the District level.

It is now worthwhile to analyse the ratio of female participation in this occupational group. Out of the total workers accounted for this function in this region 274,121 were males and 11,035 were females which constituted 96.1 percent and 3.9 percent of the proportion respectively as against 97.8 percent and 2.2 percent for the state of Uttar Pradesh. The ratio of female workers varied from the maximum of 77 per 1000 workers in the District of Ghazipur to the minimum of 17 in Bahraich District. The female participation was less pronounced in the trans-Ghaghra tract and Southern Upland sub-region than in the Doab sub-region (Table VIII-2).

The workers of the effective population age-group (15 to 59 years) made up the major proportion of 87.9 percent of the total workers engaged in trade and commerce in this region, while 2.0 percent was recorded by those below 14 years of age and 10.1 percent by those having 60 years and more age. The ratio of workers under different age groups varied widely from one district to another in the region. The contributions made by the persons of the effective population age group varied from the maximum of 89.7 percent in the District of Gorakhpur to the minimum of 85.8 percent in the District of Azamgarh, while in case of children the highest contribution was 2.6 percent

in each of the Districts of Deoria, Azamgarh and Ballia and the lowest was 1.3 percent in the District of Gorakhpur. In the age group of 60 years and above, the ratio varied from the maximum of 12.4 percent in Ghazipur District followed closely by Ballia District with 11.9 percent to the minimum of 8.5 percent in Deoria District.

The next important aspect relates to the distribution of ~~the~~ such workers in rural and urban areas of this region. Of the total workers engaged in the activities of trade and commerce in this region, as many as 46.6 percent worked and lived in the urban centres as against 62.1 percent in case of the State of Uttar Pradesh. Even this low proportion was not uniformly distributed among the urban centres of the region, rather it varied significantly ranging from the maximum of 76.3 percent in Varanasi District followed closely by Mirzapur District with 67.3 percent to the minimum of 24.8 percent in Basti District. The proportion of urban composition of the labour force engaged in trade and commerce is to a large extent dependent upon the ratio of urban population because the activities of trade and commerce are very much concentrated in the urban areas.

In the rural areas of this region 1.7 percent of the labour force was engaged in this function as against 21.3 percent in its urban areas. The proportion of workers engaged in trade and commerce to the total labour force of the rural areas of this region varied from the maximum of 2.5 percent in Ballia District to the minimum of 1.0 percent in Bahraich District, while in the case of urban areas it ranged from the highest of

35.9 percent in Sultanpur District followed closely by Pratapgarh District with 35.7 percent to the lowest of 13.6 percent in Azamgarh District.

The large urban proportion points out the urban character of this occupation which occupies an eminent place in economic structure of the urban areas. The male workers outnumbered female workers at all the levels. The proportion of the male workers in the urban areas varied from the maximum of 37.6 percent in Pratapgarh District to the minimum of 17.0 percent in Azamgarh District, while for females it ranged from the highest of 15.0 percent in Sultanpur District to the lowest of 2.3 percent in Azamgarh District. Thus there existed a greater magnitude of variation in case of the female workers than in case of the male workers in the urban areas of this region at the District level. Usually the Districts with lower urban population maintained higher percentage of male and female workers engaged in trade and commerce than those maintaining a higher proportion of urban population.

A greater magnitude of variation exists at tahsil level than that already noticed at the District level. Since this function is more urban oriented than its concentration in the Tahsils with more urban population is quite natural. There were eighteen Tahsils having no urban centre and hence with no urban population in this region and the proportion of such workers in these Tahsils never exceeded this region's average of 2.9 percent. Among these Tahsils also the proportion varied quite widely ranging from the maximum of 2.8 percent in Zamania to the

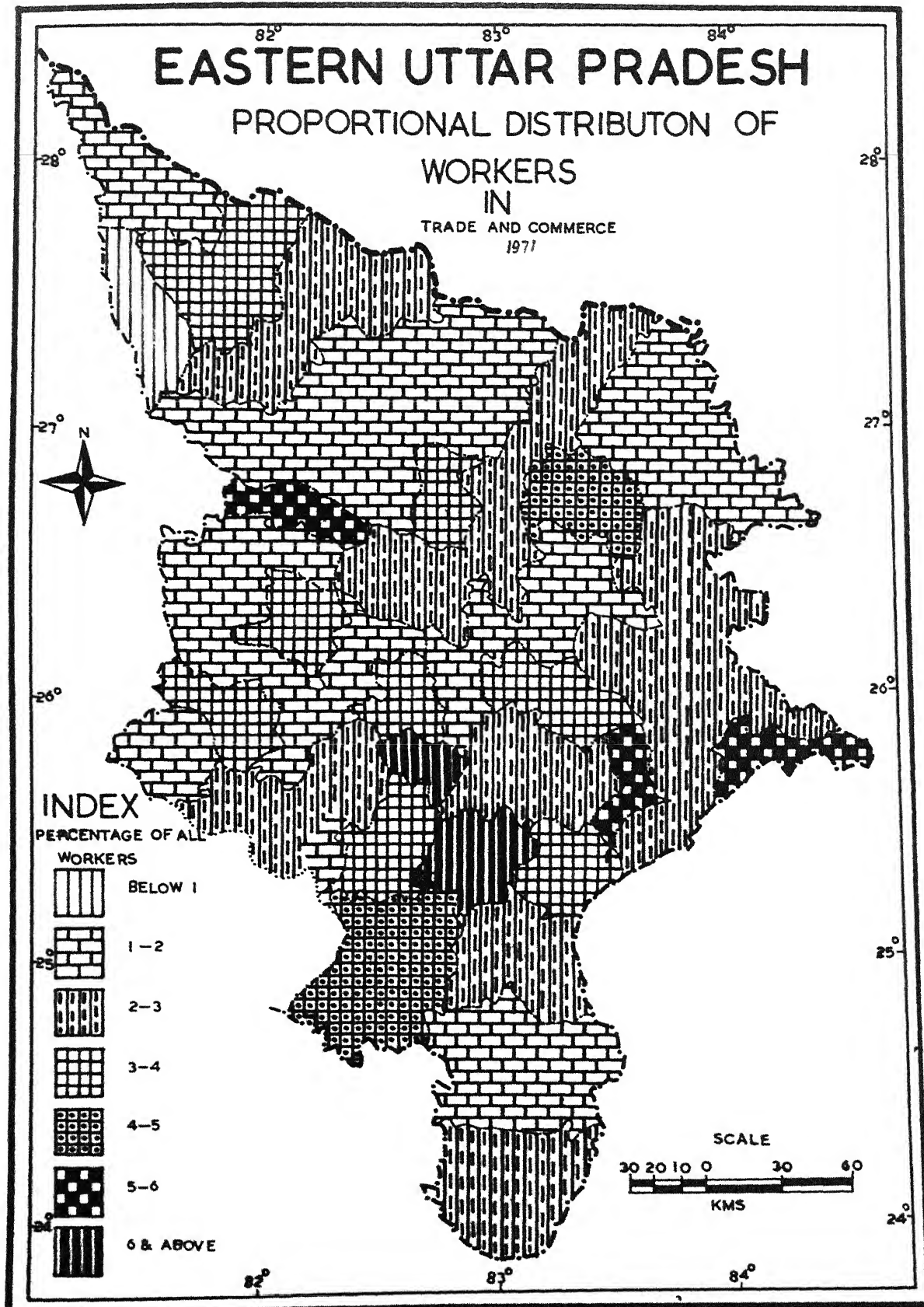
minimum of 0.6 percent in Kaiserganj. The Tahsils with urban population numbered forty three and among them the tahsil of Varanasi with 9.9 percent of its total labour force engaged in trade and commerce lead the rest followed by Jaunpur with 6.4 percent, Faizabad with 6.0 percent, Ghazipur with 5.2 percent, Mirzapur with 4.9 percent and Gorakhpur with 4.6 percent etc. There exists a closer relationship between the proportion of workers engaged in trade and commerce and those engaged in industrial activities on the one hand and the extent of urbanisation on the other hand. The details of such workers have been provided in Appendix B3. Based on the proportion of such workers all the Tahsils have been classified into different categories as shown in Fig. 46.

Table VIII-5

Frequency distribution of workers engaged in trade and commerce at Tahsil level, 1971

Category	Range of proportions	Frequency of tahsils	Cumulative frequency
I	1.00 percent and below	1	1
II	1.01 to 2.00 percent	21	22
III	2.01 to 3.00 percent	23	45
IV	3.01 to 4.00 percent	9	54
V	4.01 to 5.00 percent	2	56
VI	5.01 to 6.00 percent	3	59
VII	6.01 to 7.00 percent	1	60
VIII	9.01 to 10.00 percent	1	61

A glance at Fig. 46 points out that the Tahsil of Kaiserganj is the most backward only and forms a category in itself. Out of sixty one Tahsils of the region, forty five had less than 3.00 percent of proportion (Table VIII-5) and



FIGNO.46

among them the majority came from the Trans-Ghaghra sub-region and the western part of the Doab sub-region, although some of the Tahsils from the Southern Upland sub-region were also included. The Tahsils with more than 3.00 percent of their working population engaged in trade and commerce are usually those having District headquarters located in them, with the exception of Mohemmedabad, Shahganj, Gyanpur and Chandauli which are known in the region for their industrial and other economic activities associated with trade and commerce. The distribution pattern of the workers of this functional group at the Tahsil level can be better understood in the form of frequency analysis (Table VIII-5) and by means of graphical presentation (Fig.48).

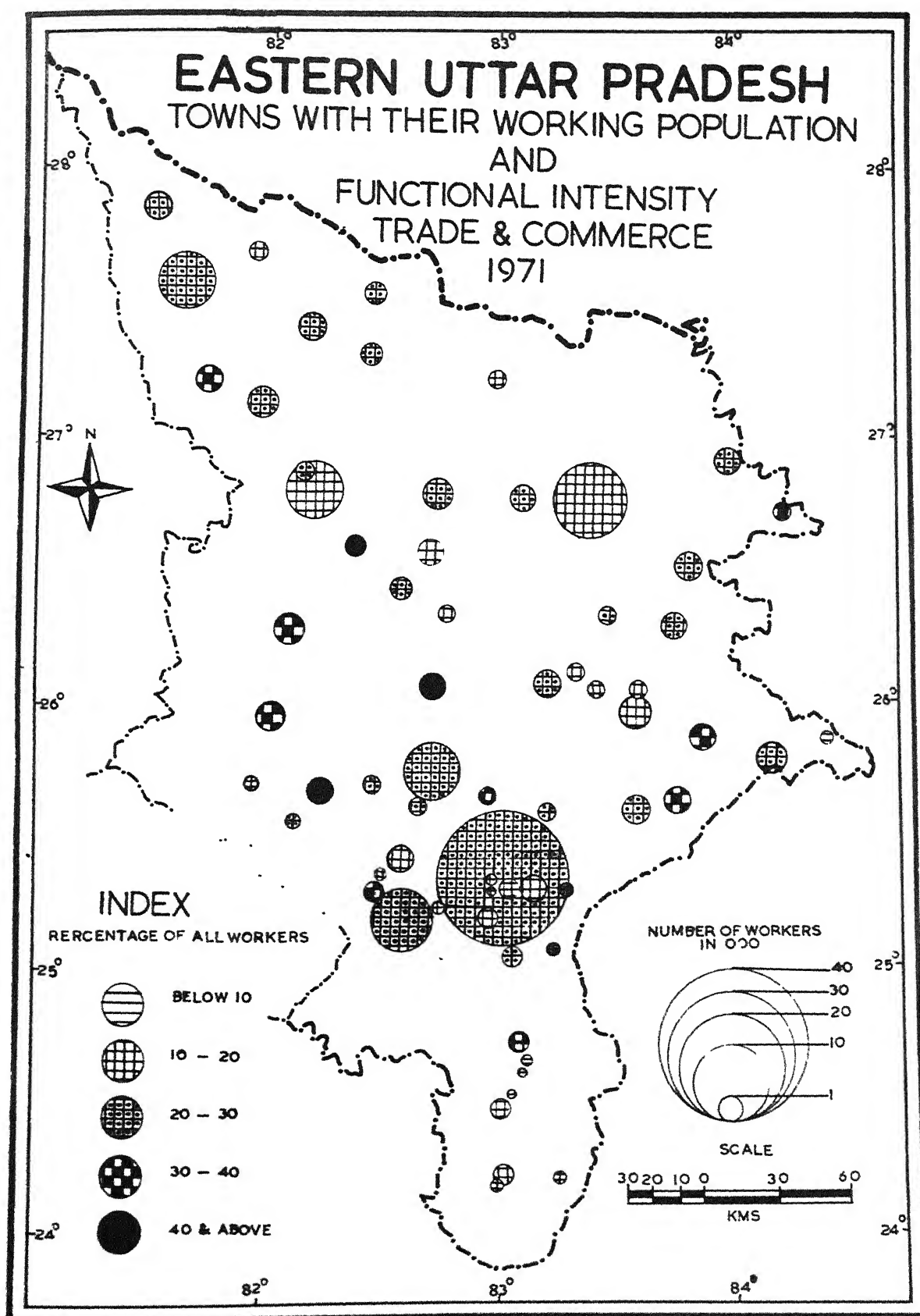
The sex composition of the workers engaged in this functional group varied widely from one tahsil to another ranging from the maximum of 104 female workers per 1000 workers in Saidpur to the minimum of 14 in Nanpara.

As regards the relative significance of Tahsils in respect of the size of labour force (Appendix B3) engaged in trade and commerce, the Tahsil of Varanasi with four urban centres namely Varanasi (U.A.), Maruadih, Ram Nagar and Lohta located within its limit ranked highest as it accounted for 14.9 percent of the workers of this functional group in this region, followed by Gorakhpur with 5.8 percent, Mirzapur with 3.4 percent and Faizabad with 3.2 percent. Other Tahsils which followed in order were Jaunpur with 2.8 percent, Bahraich with 2.75 percent, Ballia with 2.65 percent, Basti with 2.2 percent, Sultanpur with 2.15 percent, Mohemmedabad (in Azamgarh) with

2.1 percent, Balrampur with 2.06 percent, Chandauli with 1.97 percent, Pratapgarh with 1.85 percent, Ghazipur with 1.8 percent, Gonda with 1.77 percent and Deoria with 1.75 percent. Twenty Tahsils recorded 5,000 or more workers engaged in this occupation of trade and commerce. The Tahsils ranking higher are also noted for their proportion of urban population and industrial activities.

It is quite clear that the urbanisation and industrial functions are the important determinants of the dimensions of the activities associated with trade and commerce. It would be now in the fitness of things to analyse the size of such workers and their sex composition at the individual urban centres (Appendix B4). Varanasi is the largest commercial centre of Eastern U.P. It is in fact the commercial capital of the region.

Of the total urban working population of Eastern Uttar Pradesh, 21.3 percent was engaged in the occupation of trade and commerce and this accounted for 133,009 persons, out of which 3,642 were female workers. Thus the sex ratio was on the average 28 female workers per thousand workers as against 17 for the state of Uttar Pradesh. The greater participation of females in this function in the rural areas is due to the fact that the trade and commerce (particularly the retail trade) of the villages are carried on by a large number of female members of the families of such castes as Turhas, Koeris, Baniyas etc. The ratio of female workers varied widely from one urban centre to another depending on the size and situation of the urban centre and the items involved in the transactions of trade and



FIGNO. 47

commerce. It ranged from the maximum of 77 females in Kopaganj (Azamgarh) and Lohta (Varanasi) to the minimum of 4 females in Siwarahi. Maruadih, a town of railway locomotive workshop near Varanasi, had no female workers engaged in this occupation and so it recorded the nil ratio of females. It is in fact a service centre and not a trade and commerce centre and hence may be treated as an exception.

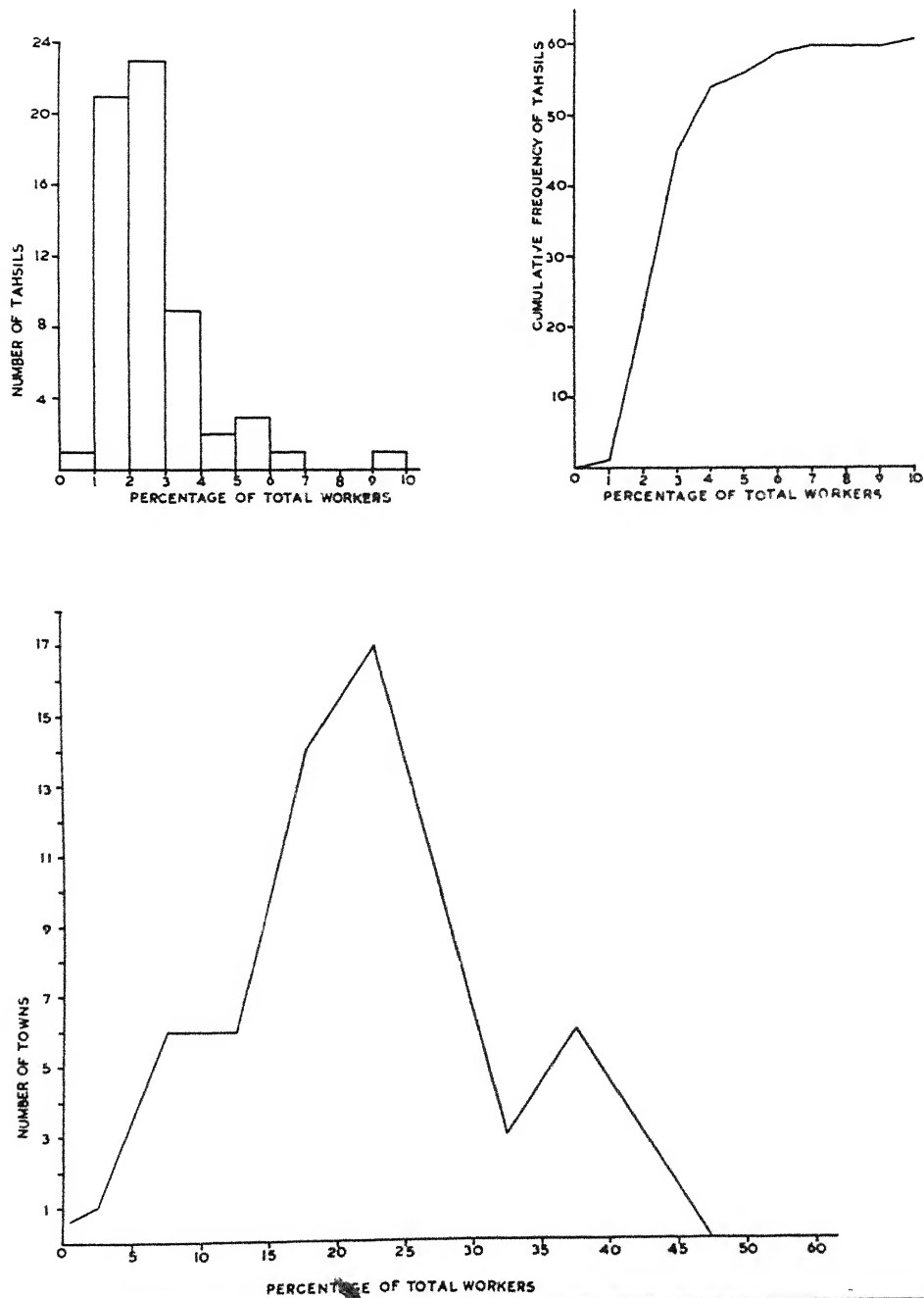
Urban centres are also not equally important in respect of the size of workers engaged in trade and commerce in them. A large share held by an individual town indicates the significance of that town in the region. In a way the importance of a centre in trade and commerce in the region can be recognised by the size of its labour force engaged in this function and this ranks the urban centre according to its utility in the region. The size of workers in this functional group varied from the maximum of 36,596 persons in Varanasi to the minimum of 41 persons in Maruadih. By far the largest centre of trade and commerce in this region is the urban agglomeration of Varanasi which accounts for 27.5 percent of the total workers engaged in trade and commerce in the region. Besides this, there were nine more urban centres in the region, each of which had more than 3,000 persons performing this function. Next in order come these nine towns such as Gorakhpur (8.5 percent), Mirzapur (5.3 percent), Faizabad (4.3 percent), Jaunpur (4.2 percent), Bahraich (3.8 percent), Basti (2.6 percent), Sultanpur (2.5 percent), Ballia (2.4 percent) and Gonda (2.3 percent). The four urban centres i.e. Varanasi, Gorakhpur, Mirzapur and Faizabad together accounted

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for 45.6 percent of the labour force engaged in trade and commerce of all the urban centres of this region. The next six in that order accounted for 17.8 percent more of the total workers. All these ten urban centres which ranked upto tenth order according to the size of their workers engaged in this functional group accounted for 63.4 percent of the total workers. Therefore, the concentration of the activities of trade and commerce in the urban centres and their more pronounced concentration in large towns are the characteristic features of the distribution of such workers in the region (Fig. 47).

It is also an important aspect to analyse the specialisation of this function in certain urban centres. The proportion of the total labour force of the individual urban centre in this function indicated its functional specialisation. Therefore the proportion of the labour performing this function in the individual urban centres is taken into account/consideration and this proportion varied widely ranging from the maximum of 43.2 percent in Shahganj followed closely by Gosaiganj with 42.29 percent and Mogra Badshahpur with 41.05 percent to the minimum of 1.2 percent in Maruadih (Fig. 47). It may be seen that the functional specialisation is noticed more in the smaller towns because the larger towns are the multifunctional in character and so most of them do not rank higher as regards the specialisation of this function. Even the city of Varanasi having 27.5 percent of the total workers engaged in trade and commerce in this region ranked quite low in this respect because of its multifunctional character. On the other hand the smaller towns

EASTERN UTTAR PRADESH TAHSILS & TOWNS WITH THEIR WORKERS ENGAGED IN TRADE & COMMERCE 1971



FIGNO, 48

developed the activities of trade and commerce of much local significance and so they specialised in the function. In order to understand the functional specialisation of the urban centres in this region, they have been grouped into the following categories based on the proportion of their workers engaged in this function at the interval of 10 percent.

Table VIII-6

Frequency distribution of urban centres based on the proportion of their workers engaged in trade & commerce

Category	Range of proportion	Frequency of urban centres	Cumulative frequency
I	10.00 percent and below	8	8
II	10.01 to 20.00 percent	19	27
III	20.01 to 30.00 percent	27	54
IV	30.01 to 40.00 percent	9	63
V	40.01 to 50.00 percent	3	66

A glance at the above frequency distribution and its graphical representation (Fig. 48) gives a comparative idea of the urban centres falling under different proportions. The majority of urban centres fall in the range between 20.01 percent and 30.00 percent. These urban centres with varying proportions of their labour force engaged in performing the functions of trade and commerce indicate their relative significance in the region.

The activities of trade and commerce play a pivotal role in the economic life of a region. Such a functional group consists of varied types of workers, ranging from a hawker in the street to a big business man sitting in his palatial building

and transacting the business connected with trade and commerce. The retail trade and the wholesale trade are the two important modes of transaction. The female participation is comparatively more pronounced in the retail trade than in the wholesale trade. The retail trade is very much pronounced in the rural areas where even a large number of women participate in this function. The trade and commerce are mostly run by the private sector, the public agencies have started their participating in a bigger way only recently but even today the private sector dominates. The government should come forward with larger capital investment in this function in order to save the people from the difficulties and exploitation to which the common man is subjected by the vested interests to earn more the profit. The function of trade and commerce is very much associated with the collection, production and distribution of commodities and so it reflects the economic life of the people living in a region. This function is associated as much with the agricultural products as with the manufactured goods of the factories and those of the cottage, village and handicraft industries. An effective control by the government on the function of trade and commerce might bring out revolutionary changes in the system of collection and distribution of commodities which may be much beneficial to the people living in this region.

8.7. Transport, Storage and Communications:

Among the occupations of the Tertiary Sector, the function of transport, storage and communication also plays a very significant role in the development of the economic life

of the people living in the region. The details of such economic activities associated with this livelihood class have been provided in Appendix A1. The activities connected with the occupation of transport, storage and communication are of paramount significant to the people as they are pre-requisites for a successful implementation of the developmental activities in a region. The extent of these facilities available in the region are indicative of its existing and potential capacity of economic reconstruction. Hence the distribution of workers engaged in them carries a valuable significance in the study of the occupational distribution of population of a region.

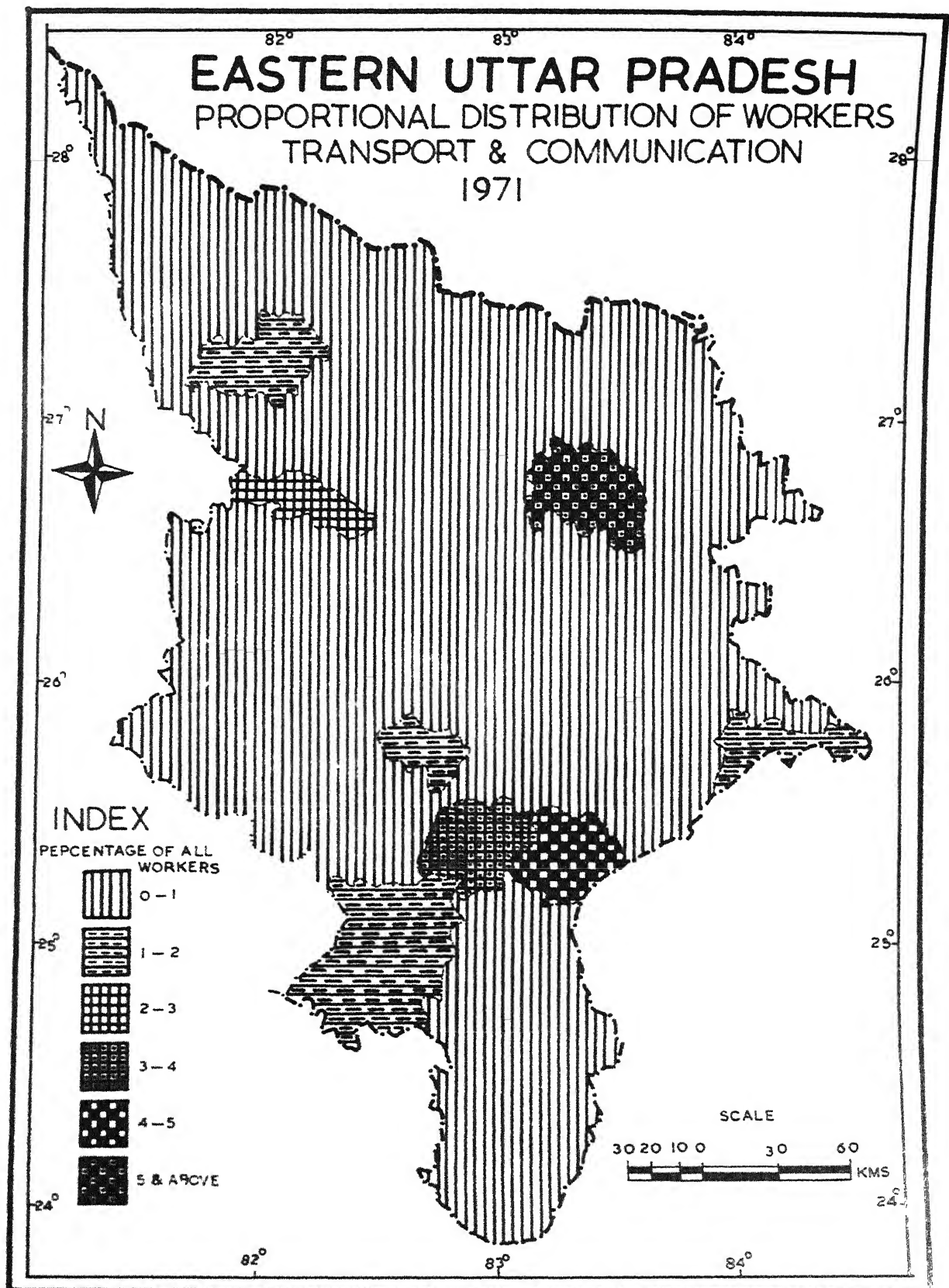
8.8. Distribution of Workers Engaged in Transport, Storage and Communication:

According to the size of workers constituting this functional group, it is the smallest group of the Tertiary Sector, but its significance need not be over emphasised. The workers of this functional group numbered 79,535 persons in 1951 and it increased to 103,668 persons in 1961 but fell to 95,234 persons in 1971. But as regards its proportion, it rose from 0.7 percent in 1951, to 0.9 percent in 1961 and then to 1.0 percent in 1971 in this region as compared to 1.1 percent, 1.4 percent and 1.7 percent respectively for the state of Uttar Pradesh as a whole. The lower proportion of labour force engaged in transport, storage and communication in this region as compared to this State indicates that the poorer facilities are available in this respect in Eastern Uttar Pradesh. However,

the continuous increase in the proportion of such workers to the total labour force at the successive censuses from 1951 to 1971 indicates a period of growth and progress in the activities of this occupation. This further shows that the developmental activities under the Five Year Plans in the region have also brought a significant change in the spheres of transport, storage and communication. But a rising tendency of proportion is not seen in all the districts of the region, as some of them show negative variations also (Table VIII-1).

The proportion of such workers to the total labour force of respective districts ranged from the maximum of 3.6 percent in Varanasi District followed by 2.3 percent in Gorakhpur District to the minimum of 0.3 percent in Bahraich and Basti Districts. It is also useful to study the actual size of workers of this functional group in the Districts of this region and to rank them in order to know their relative significance in the region. The District of Varanasi alone accounted for 31.4 percent of the labour force of the region engaged in transport, storage and communication and it ranked first followed by Gorakhpur with 24.2 percent, Gonda with 6.2 percent, Mirzapur with 6.1 percent and Faizabad with 5.7 percent. Among other districts with more than 3,000 persons gainfully engaged in this function were Deoria (3.8 percent), Azamgarh (3.5 percent) and Basti (3.45 percent). All other districts employed less than 3,000 workers each in this function.

Another important aspect of the labour force performing this function in this region is its division into male and female



FIGNO 49

workers and their proportions to the respective male and female working populations in each District of the region. Since the activities associated with this function are hard and they require much of manual labour, they are not suitable for female workers. This is why the female participation is lowest in this function amongst the occupations of the Tertiary Sector in this region. In case of males the proportion to the total male working population in the Districts ranged from the maximum of 4.1 percent in Varanasi followed by Gorakhpur with 2.7 percent to the minimum of 0.3 percent in Bahraich. For female workers it varied from the maximum of 0.35 percent again in Varanasi District to the minimum of 0.04 percent in Mirzapur District.

Now let us analyse the workers of this region performing this function, by age groups, because such an analysis will indicate as how the workers from different age groups participated and contributed towards this occupation. Of all the workers of this functional group in the region in 1971, 0.8 percent came from the age group of children upto 14 years and 3.5 percent from the age group of persons of 60 years and more as against 1.4 percent and 5.1 percent respectively for the State of Uttar Pradesh as a whole. Therefore, the persons from the above age groups other than effective population group accounted for 4.3 percent in the region as against 6.5 percent in the State. Thus as compared to the State of Uttar Pradesh, the workers of this function under the above age groups are less pronounced in this region. Further details of the variation of proportion of such workers under different age groups at the

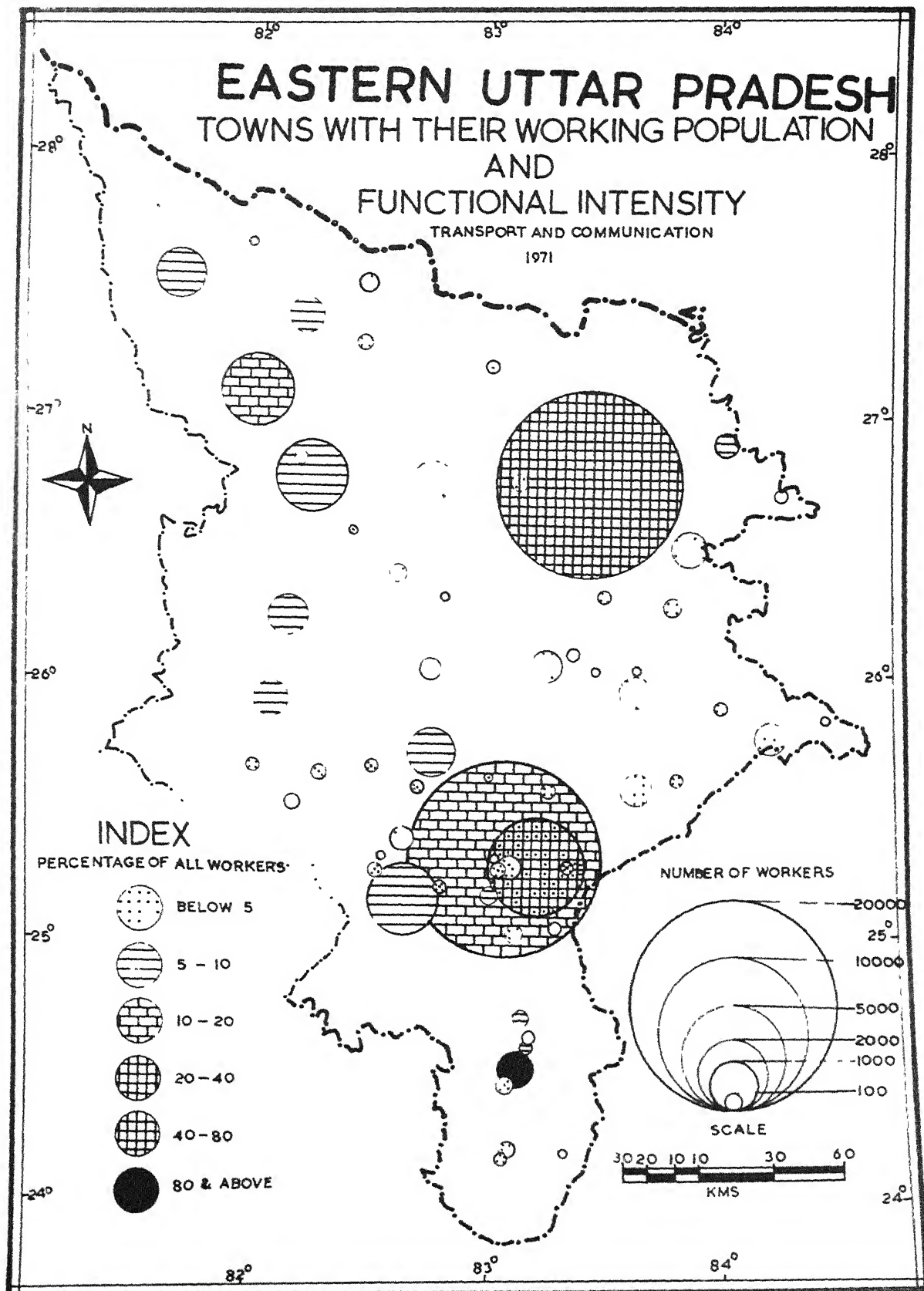


FIG NO. 50

district level have been provided in the table VIII-3. However, like all other occupations, in this occupation also the persons of the effective population age group constituted the major proportion of workers of this functional group. It varied from the maximum of 96.9 percent in Gonda District to the minimum of 92.3 in Ghazipur District. The workers of effective populations age group were more pronounced in the Trans-Ghaghra sub-region and the western part of the Southern Upland tract. In the eastern part of Doab sub-region, the workers in the age group of 60 years and more were quite substantial as compared to other parts of this region.

The distribution of workers of this function is eminently urban oriented as 58.1 percent of these workers came from the urban areas. This proportion is, however, much less than 75.6 percent accounted for U.P. as a whole. Their division into rural and urban areas by Districts showed variation of greater magnitude as it ranged from the maximum of 72.8 percent in Varanasi District, followed by 71.0 percent in Bahraich District and 70.4 percent in Gorakhpur District to the minimum of 9.0 percent in Allahabad District*. In some of the Districts the urban composition of such workers is very much pronounced while in others it is much less than the average for the region (Table VIII-4). Eastern Uttar Pradesh accounted for 9.5 percent and 0.9 percent of male and female working populations separately engaged in the occupation of transport, storage and communication

* Allahabad means only Tahsils of Phulpur, Soroan and Handia.

in its urban areas as compared to their 0.5 percent and 0.03 percent respectively in its rural areas. In rural areas the proportion varied from the maximum of 1.5 percent in the district of Varanasi, followed by 0.9 percent in Gorakhpur District to the minimum of 0.09 percent in Bahraich District, while in urban areas it ranged from the highest of 26.9 percent in the District of Gorakhpur to the lowest of 2.3 percent in the District of Azamgarh in case of males. In case of females it varied from the maximum of 0.1 percent in Ghazipur District to the minimum of 0.01 percent in each of Pratapgarh, Basti, Deoria, Ghazipur and Varanasi Districts in the rural areas as compared to the highest of 4.2 percent in Gorakhpur District, followed by 2.6 percent in Gonda District and 2.3 percent in Varanasi District to the minimum of 0.06 percent in Sultanpur District in case of urban areas. In the District of Azamgarh no female participated in the labour force of this function in urban areas while in many of the Districts their proportion was negligible both in rural as well as in urban areas.

After the analysis of variations at the District level, let us study and analyse the distributional pattern of such workers at the Tahsils level.

The proportion of labour force engaged in the activities of transport, storage and communication at the Tahsil level shows the variation of a wider range. It rises to the maximum of 5.6 percent in the Tahsil of Gorakhpur, followed by those of ~~wi~~ Chandauli with 5.3 percent, Varanasi with 4.4 percent, Faizabad with 2.3 percent, Gonda with 1.7 percent, Jaunpur and

Mirzapur each with 1.5 percent and Ballia with 1.1 percent. Among other Tahsils, the proportion of such workers varied from the maximum of 0.95 percent in Robertsganj to the minimum of 0.05 percent in Kaiserganj. Although this discussion is useful, yet a more important aspect of the distribution of such workers is to locate the Tahsils with a high concentration of such workers so as to indicate their regional significance in order of the size of their workers under this functional group. The Tahsil of Gorakhpur well known for its railway and road transport in the region, maintained as much as 21.4 percent of such workers of the region and it ranked first in order, followed by those of Varanasi with 19.9 percent, Chandauli with 10.2 percent, Gonda and Faizabad each with 3.7 percent, Mirzapur with 2.1 percent, Jaunpur with 2.0 percent, Ballia with 1.96 percent and Robertsganj with 1.5 percent. Nineteen Tahsils had more than 1,000 workers each in this function including the nine already mentioned. The remaining ten in order of the size of their workers engaged in this function were Basti, Sultanpur, Bahraich, Deoria, Pratapgarh, Akbarpur etc.

In order to have a comprehensive idea about the proportional distribution of workers at the tahsil level in the region all the tahsils have been grouped and their distribution has been shown in Fig.51. A glance at the frequency table VIII-7 and Fig.49 enable us to locate the areas covered by different proportion categories.

Another important aspect of the study of these workers is the rate of its female participation in the different Tahsils

EASTERN UTTAR PRADESH TAHSILS & TOWNS WITH THEIR WORKERS ENGAGED IN TRANSPORT & COMMUNICATION 1971

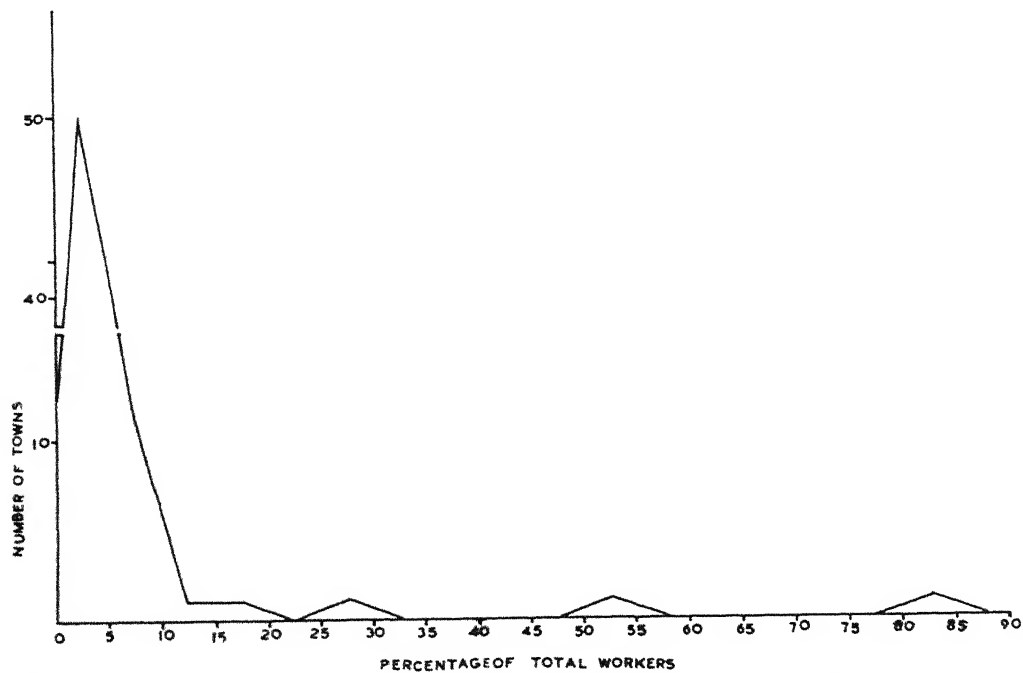
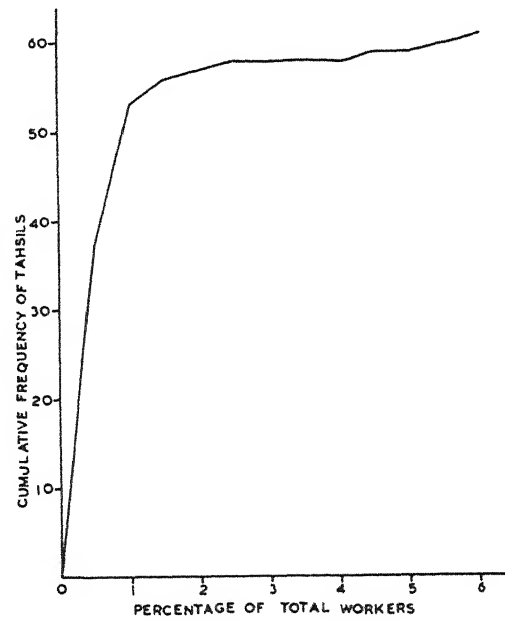
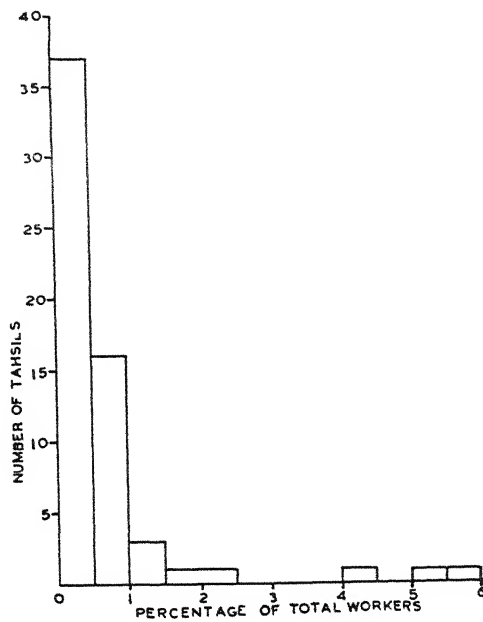


FIG NO 51

of the region. Some Tahsils were noted for nil or negligible female participation in this function in the region. Mohammadabad Tahsil of Ghazipur District stands first in the sex ratio accounting for 122 female workers per 1,000 workers. All other Tahsils had the ratio below 55.

Table VIII-7

Frequency Distribution of Tahsils in respect of the workers engaged in transport, storage and communications

Category	Range of proportion	Frequency of tahsils	Cumulative frequency
I	0.5 percent and below	37	37
II	0.51 to 1.00 percent	16	53
III	1.01 to 1.50 percent	3	56
IV	1.51 to 2.00 percent	1	57
V	2.01 to 2.50 percent	1	58
VI	4.01 to 4.50 percent	1	59
VII	5.01 to 5.50 percent	1	60
VIII	5.51 to 6.00 percent	1	61

The urban character of this occupation has concentrated its activities mainly in the urban centres. The proportion of such workers varied significantly from one urban centre to another. The size of such workers in each urban centre plays its key role in the economic life of the people living there. The size of such workers in the urban centres of Eastern U.P. has been provided in Appendix B4.

The size of workers engaged in this occupation formed varied dimensions in the urban centres of this region. It ranged from the maximum of 16,718 workers in Varanasi, followed closely by Gorakhpur with 16,170 workers to the minimum of ten persons

in Mohemmadabad of Azamgarh District. Among the urban centres of Eastern Uttar Pradesh, Varanasi led the list as it accounted for 30.2 percent of such urban workers of the region, followed by Gorakhpur with 29.2 percent and Mughal Sarai with 7.8 percent. Others in order of size of such workers were Gonda with 4.25 percent, Faizabad with 4.2 percent, Mirzapur cum Vindhyachal with 4.01 percent, Jaunpur with 2.00 percent and Bahraich with 1.9 percent (Fig. 50). Each of these eight towns maintained more than 1,000 workers in this function and they ranked higher in order than others. Although the size of such workers indicates the dimension of the activities associated with transport, storage and communication in the urban centres yet it does not reveal the specialisation of this function in them. Higher this proportion, more is the specialisation and vice versa.

Based on the functional specialisation, Chopan, a small urban centre in the Districts of Mirzapur, leads the list of urban centres with 80.2 percent of its labour force engaged in the occupation of transport, storage and communication. It is followed by Mughal Sarai with 53.4 percent, Gorakhpur with 25.5 percent, Gonda with 16.1 percent, Varanasi with 10.0 percent, Markundi with 8.5 percent, Faizabad with 7.6 percent, Sultanpur with 7.4 percent, Mirzapur cum Vindhayachal with 7.1 percent and Pratapgarh with 6.6 percent (Fig. 50). All other urban centres maintained less than 6.0 percent proportion of the workers engaged in this function, varying from the maximum of 5.7 percent in Balrampur to the minimum of 0.4 percent in Mohemmedabad of Azamgarh District. Based on the proportion of

such workers in the urban centres of the region they have been grouped into different cateries of proportion and their representation has been made in Fig.51.

The distribution of such workers into males and female in the individual urban centres of this region presents a unique feature of the female participation. On the average there were 11 females per 1000 workers in this function in this region. Thirty four urban centres had no female workers engaged in this function. Among the remaining 32 urban centres, the female participation varied from the maximum of 433 female workers per 1000 workers ^{in Maruadih} to the minimum of 1.5 female workers in Basti.

8.9. Other Services:

The last but important occupational category of 'other services' of Tertiary Sector plays a vital role in the economic structure of a region. It is useful to mention the activities included in this functional group. The workers engaged in services are put under the following two functional groups:

(i) The persons performing Financing, Insurance, Real Estate and Business Services; and (ii) The persons performing Community, Social and Personal services. These two functional groups have further sub-groups (Appendix A1).

8.10. Distribution of Workers engaged in Other Services:

The functional group of services engaged the largest category of workers of the Tertiary Sector as it constituted 6.6 percent in 1951, 5.2 percent in 1961 and 5.5 percent in 1971

of the total working population of Eastern Uttar Pradesh as against 10.6 percent, 9.4 percent and 8.3 percent respectively for the State of Uttar Pradesh (Table VIII-1). There has been a continuous fall in the number of such workers from 2,854,891 persons in 1951, to 2,710,081 persons in 1961 and to 2,260,812 persons in 1971. This fall was mainly due to the definitional change of the term 'worker' adopted at successive censuses which later on excluded most of the part time workers performing these services in 1971 although it treated them as workers at the earlier censuses.

A comparison between the proportions of 1951 and 1961 at the District level in the region clearly points out the fact that all the Districts of the region except that of Deoria, where the proportion rose from 2.7 percent in 1951 to 3.0 percent in 1961, noted a fall in the proportion of such workers varying from the maximum in the Varanasi District where it declined from 14.1 percent in 1951 to 11.3 percent in 1961 to the minimum in Mirzapur District where it fell from 8.3 percent in 1951 to 7.7 percent in 1961. The District of Bahraich maintained its 4.3 percent proportion at both the censuses. A comparison between the proportions of 1961 and 1971 presents a different picture as this rose from 5.2 percent 1961 to 5.5 percent in 1971. However, there existed a significant amount of variation, both positive and negative, at the District level. Following the general trend of the region, the Districts of Faizabad, Sultanpur, Pratapgarh, Basti, Deoria, Azamgarh, Jaunpur, Varanasi and Allahabad recorded an increase in the proportion

of the workers engaged in this functional group ranging from the maximum in the District of Deoria where it rose from 3.0 percent in 1961 to 4.5 percent in 1971 to the minimum in Sultanpur and Pratapgarh Districts where the proportion rose by 0.2 percent over that of 1961. In all other Districts (Bahraich, Gonda, Ballia, Ghazipur and Mirzapur) there was a fall in the proportions of such workers to their respective working populations, varying from the maximum of 2.0 percent in Ballia District to the minimum of 0.4 percent in Mirzapur District. The District of Gorakhpur, however, maintained its proportion of 4.9 percent at both the censuses.

In 1971, the proportion of such workers varied widely in the Districts of the region as it ranged from the maximum of 11.4 percent in Varanasi District followed by 7.3 percent in Mirzapur, 7.2 percent in Ghazipur and 6.7 percent in Ballia District to the minimum of 3.0 percent in Basti District. It is evident that the sub-region lying in the Trans-Ghaghra tract was noted for its low proportion followed by the western part of the Doab sub-region, while the maximum proportion was noted in the Eastern part of the Doab sub-region followed by the Southern Upland sub-region.

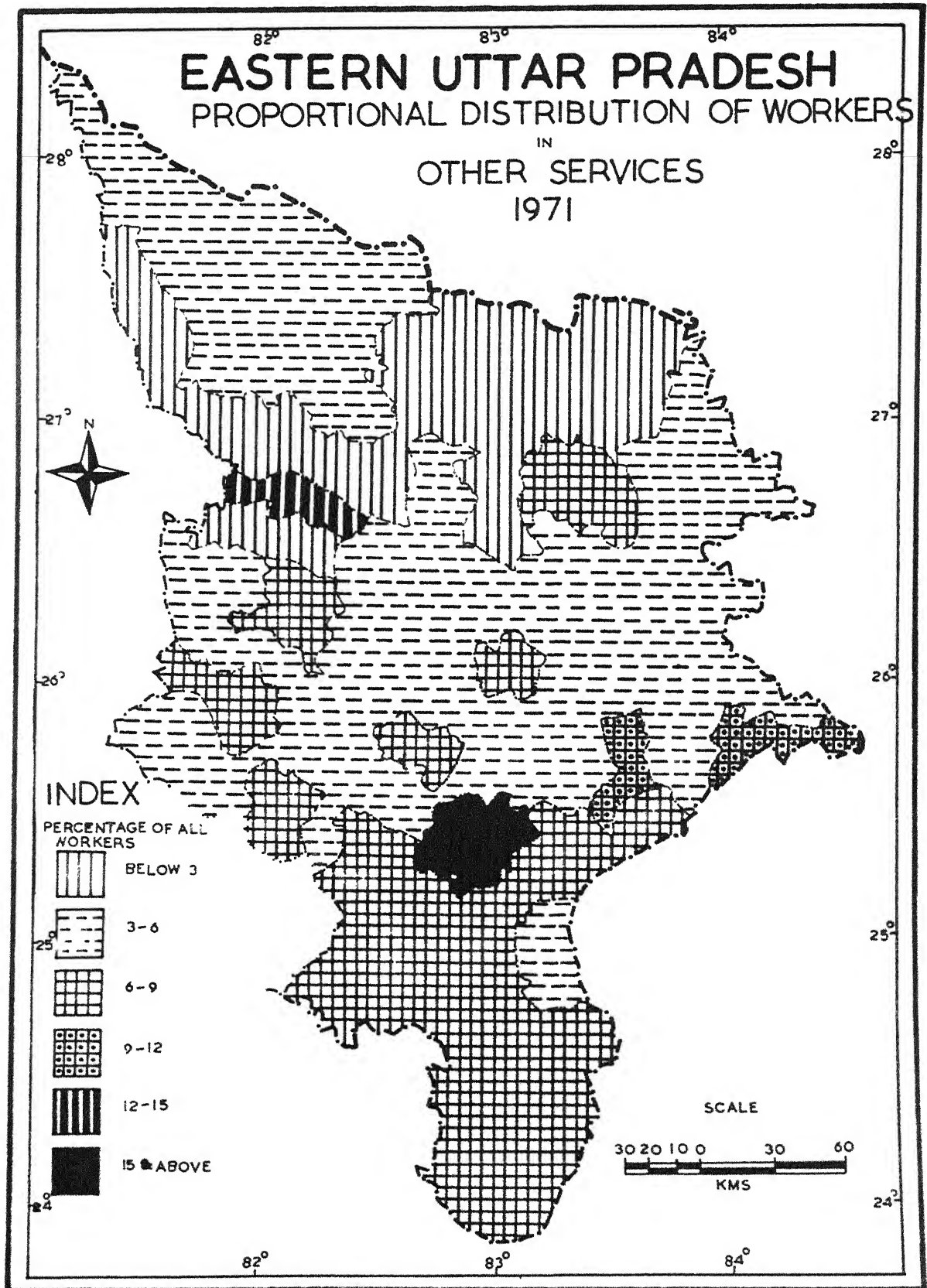
As per 1971 census, there were 490,978 male workers and 45,698 female workers engaged in this function in the region. Thus on the average there were 85 female workers per 1,000 workers engaged in different services in the region, such as banking, insurance, community development, social and personal services. It shows that the female participation is quite

substantial in this function as compared to other occupational groups of the Tertiary Sector. However, the number of female workers per 1000 workers engaged in services varied widely from one District to another, ranging from the maximum of 134 in Ghazipur followed by Sultanpur (94) and Azamgarh (93) to the minimum of 48 in Bahraich District. The proportion of male and female workers separately to their respective working population varied quite significantly from one district to another as shown in table VIII-2.

Now let us come to study and analyse the pattern of distribution of these workers as classified by their age groups, because such an analysis would enable us to point out as how the workers from different age groups composed the occupational group performing the function 'other services'. The persons from the age groups other than the effective population age group do not join the labour force usually. However, they join it under some economic strain and due to poor social and demographic conditions prevailing in the region. Their participation in the labour force increases the multiplicity of the unemployment problem faced acutely by this region as well as this State and the country. Undoubtedly the workers from the effective population age group constituted the major part i.e. 91.9 percent of the workers engaged in this function, while the children had 2.8 percent and old and retired persons had 5.3 percent of its proportion as compared to 92.2 percent, 2.4 percent and 5.4 percent respectively for the State of Uttar Pradesh as a whole. But this composition of workers under different age groups

varied widely in the Districts of this region. It ranged from the maximum of 94.7 percent in Basti District to the minimum of 89.7 percent in Ghazipur District for the workers of effective population age group. A perusal of the table VIII-3 points out that in the Division of Varanasi the workers from the age groups other than the effective population age group were more preponderant in this function as compared to other parts of the region.

This region is quite less urbanised. Even then 31.0 percent of the workers performing various services were accounted for as urban workers in Eastern Uttar Pradesh as compared to 46.1 percent for the state of Uttar Pradesh. The urban composition of such workers was lower in this function than in other industrial categories of the Tertiary Sector. However, this urban composition varied significantly in the Districts of this region, ranging from the maximum of 51.1 percent in Varanasi District followed by 45.4 percent in Mirzapur and Faizabad Districts each, 39.8 percent in Gonda District and 34.9 percent in Bahraich District to the minimum of 11.7 percent in Pratapgarh District. In this region 4.0 percent of the rural working population and 26.7 percent of the urban working population were engaged in 'services' as compared to 5.1 percent and 30.4 percent respectively in the State of Uttar Pradesh. Therefore, the workers of this functional group constituted many more times of their proportion of the rural areas in the urban areas. The proportion of such workers varied significantly in the rural as well as the urban areas at the district level and still greater variation was noted in the case of male and female workers.



The variations in the distribution of such workers noticed at the District level are bound to be more at the Tahsil level and so a discussion in this respect would certainly lead us to locate more precisely the areas having more concentration in respect of the workers performing services (from the domestic to the highest executive services) either in the private or under the public sector in the region. Appendix B3 provides the details of the distribution of persons, male and female workers in this function according to 1971 census.

The proportion of all workers to the total working population at the Tehsil level in this region varied from the maximum of 16.1 percent in Varanasi followed by 12.3 percent in Faizabad, 10.5 percent in Ghazipur and 9.1 percent in Ballia to the minimum of 2.1 percent in Maharajganj. Based on the proportion of such workers, all the Tahsils of the region may be grouped into the following categories at the interval 3.0 percent of proportion. These categories have also been shown in the Fig.52 for a better understanding.

Table VIII-8

Frequency distribution of workers engaged in other services at Tahsil level

Category	Range of proportion	Frequency of tahsils	Cumulative frequency
I	3.00 percent and below	10	10
II	3.0 to 6.0 percent	33	43
III	6.0 to 9.0 percent	14	57
IV	9.0 to 12.0 percent	2	59
V	12.0 to 15.0 percent	1	60
VI	15.0 percent and above	1	61

Ten Tahsils of this region had less than 3.00 percent of their working population engaged in 'services'. All of them with exception of Bikapur are located in the Trans-Ghaghra sub-region. The rest of the Tahsils of the Trans-Ghaghra sub-region maintained more than 3.00 percent but less than 6.00 percent of their proportion, except Gorakhpur in services. The Tahsils lying in the Doab sub-region had better position in this respect. Their better position was much dependent upon the larger composition of urban population in these Tahsils. Fourteen Tahsils had their proportions between 6.00 percent and 9.00 percent. All such Tahsils except Gorakhpur were located either in the Doab or in the Southern Upland sub-regions. The Tahsils showing more than 9 percent of their working population in services were four only namely Ballia, Ghaziour, Faizabad and Varanasi. All of them were located in the Doab sub-region. The distributional pattern of workers of this functional group can also be understood in the form of frequency analysis and represented by means of graphical devices (Fig.54).

The Tahsils with large urban populations hold better position in respect of the workers engaged in 'services'. Hence urban population plays an important role in determining the size of workers employed in this functional group. The study of sex composition at the Tahsil level is also importance as it indicates the extent of cooperation received from the female workers in respect of 'services'. Since this region is economically and industrially backward, the female participation is not much encouraging here, although in a very small manner they participate

and contribute to the labour force engaged in 'services' and their composition also varied widely at the Tahsil level. It ranged from the maximum of 198 female workers per 1000 workers in Zamania Tahsil followed by 136 in Mohammadabad, 128 in Ghosi, 127 in Musafirkhana, 122 in Saidpur to the minimum of 43 in Nanpara. It is quite evident from the number of female workers at Tahsil level that there seems to be no set pattern of distribution of the female workers in this functional group. However, it was lower in the Trans-Ghaghra sub-region and in the western part of the Doab sub-region. The maximum was found in the central part of this region. All other parts maintained more than the average for the region. The distribution of such workers by individual urban centres is also of much significance and it needs an analysis here. The workers of this function constitute a substantial proportion of the workers of certain centres and this proportion varies widely from one centre to another.

8.11. Distribution of workers engaged in other services in urban centres:

Of the total workers engaged in 'services' in this region, 31.0 percent worked and lived in urban centres and 69 percent in rural areas. Appendix B4 provides the actual number of total, male and female workers of individual urban centres of this region. It also shows the sex composition in respect of such workers.

Like other functions, 'services' also do not provide equal opportunities to the people in all the urban centres. The

first and foremost analysis of the workers engaged in 'services' is their size which varies widely depending mostly on the dimension of the urban centres. But in some cases even a smaller size of urban centre constitutes a larger proportion of the labour force engaged in 'services'. To indicate the regional position of a town in this function, the proportion of workers of the town to the total workers of the region in the function should be taken into account. Bigger the town, larger its proportion and hence it has higher rank in the region. Thus the urban Agglomeration of Varanasi with 42,376 workers in this function, accounting for 25.5 percent of the total workers engaged in 'services' in the region, ranked at first place, followed by Gorakhpur with 18,880 workers and 11.4 percent proportion at the second place, Faizabad with 12,584 workers and 7.5 percent ratio had the third place, Mirzapur-cum-Vindhyachal with 8,693 workers and 5.2 percent proportion occupied the fourth place and Bahraich with 6,287 workers and 3.8 percent ratio had the fifth place. Among other towns in the same order were Jaunpur with 5,291 workers having 3.2 percent, Basti with 5,211 workers having 3.1 percent, Gonda with 4,915 workers having 3.0 percent, Ballia with 4,817 workers having 2.9 percent and Azamgarh with 4,495 workers having 2.7 percent of proportion. These figures clearly point out that all the ten urban centres ranked above according to the size of their workers in 'services' are the District Headquarters and hence they have sufficient opportunities for various types of services such as those connected with Finance, Insurance, Business, community development,

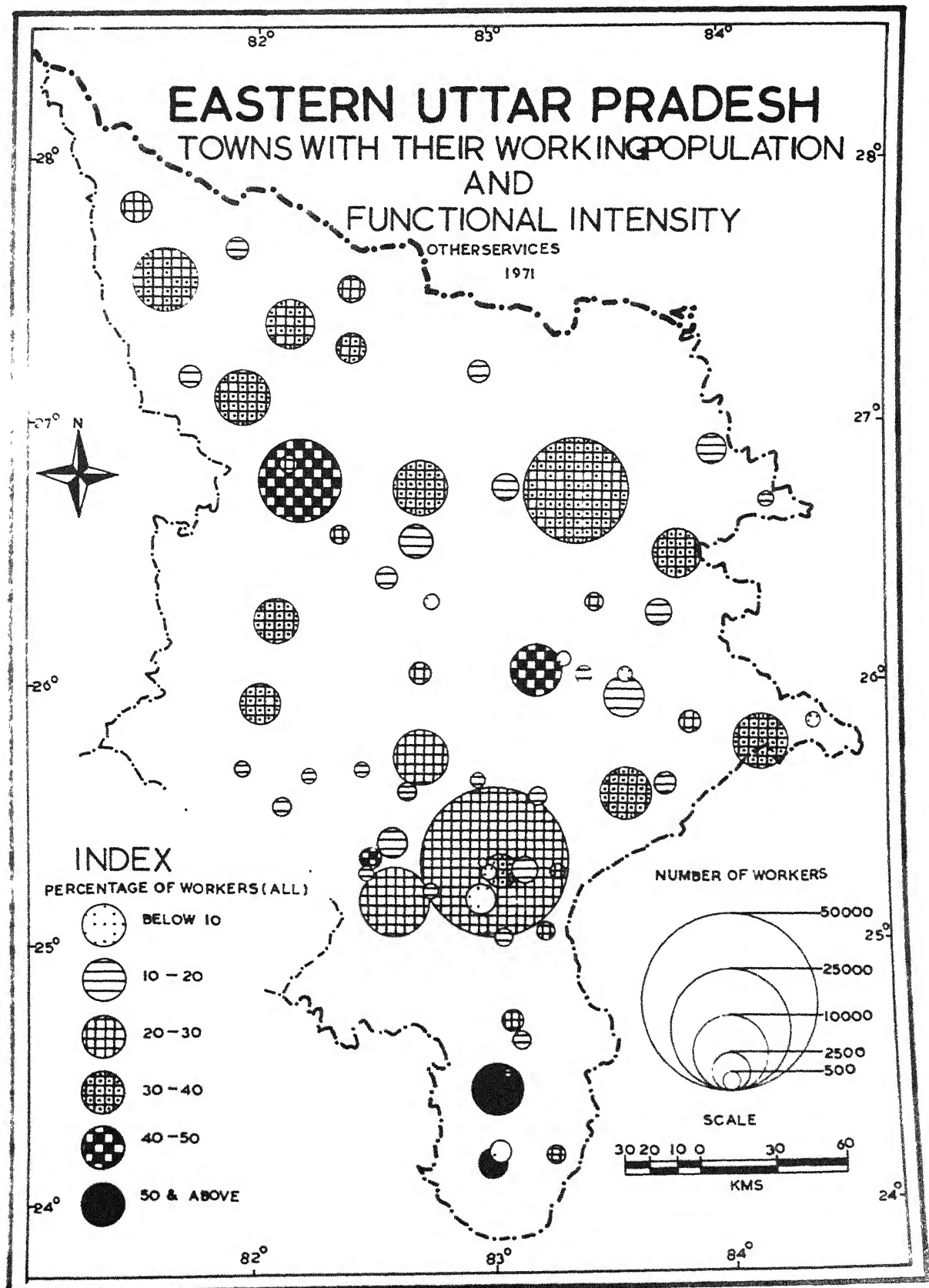


FIG NO 53

social upliftment and personal welfare, because they are more readily available in such towns than in others.

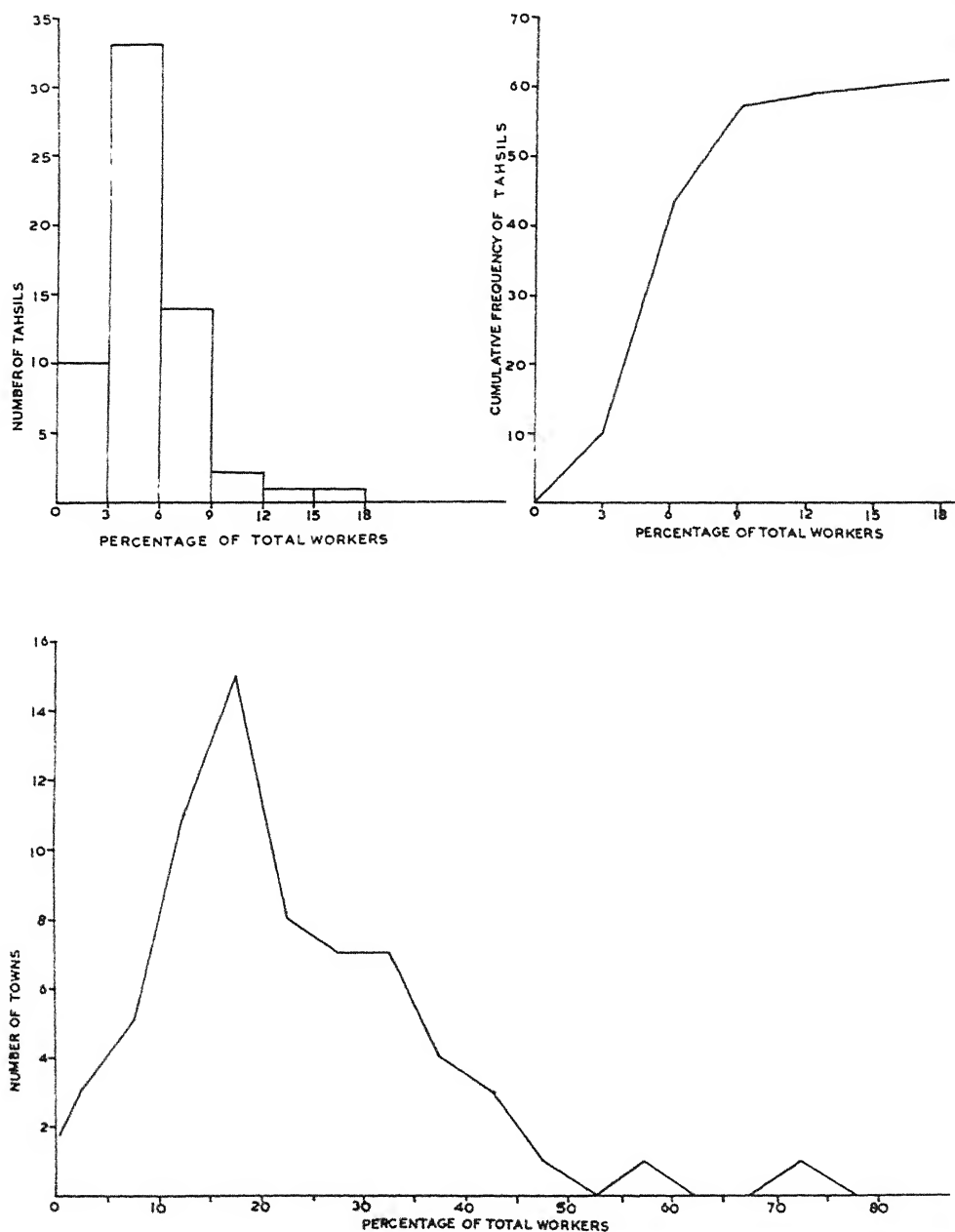
But such a ranking of towns does not indicate the intensity or specialisation of services in a function in that town. For this the proportion of workers of this functional group to the total labour force of a town is more meaningful and valid. The most specialised town in this function is Faizabad Cantt, where 88.2 percent of its labour force was engaged in services. But this statement may not be valid because this urban centre is only a part of Faizabad town. Therefore, an urban centres as whole should to taken into account. The workers engaged in 'services' in the urban centres of Eastern Uttar Pradesh constitute varying proportions of their total workers separately, ranging from the maximum of 71.8 percent in Obra, followed by 56.9 percent in Pipri, 48.5 percent in Gyanpur to the minimum of 4.3 percent in ^{east}Chunar and Markundi. The smaller towns have more specialised functions and are monofunctional or bifunctional, while the larger towns being multifunctional, fail to specialise in one function, although they may rank higher in the regional order(Fig. 53).

Usually the large and medium size urban centres have more importance, nonetheless few smaller towns excel them in respect of the proportion of female workers into their total labour force engaged in 'services'. For example, the urban Agglomeration of Varanasi, the largest urban centre of the region, with 5,196 female workers engaged in services, accounting for 29.8 percent of the total female workers of this urban centre

ranked first in Eastern Uttar Pradesh. Among the other urban centres in order of their numerical strength of female workers in 'services' are Gorakhpur having 2,003 workers with 11.5 per cent and ranked at the second place, Faizabad having 1,120 workers with 6.4 percent and ranking in the third place, Mirzapur-cum-Vindhyachal with 1,067 workers and 6.1 percent and holding the fourth place, and Bahraich and Gonda with 3.6 percent and 3.3 percent each and ranking at the fifth and the sixth places in the region. An even more significant aspect of the pattern of distribution of the female workers engaged in 'services' in the urban centres of this region is their proportion to the strength of the workers in this functional group, which also varies widely depending on the socio-economic and demographic factors prevailing in them. The number of female workers also varied, ranging from the maximum of 290 female workers per 1000 workers in Maruadih followed by Mubarakpur with 190 to the minimum of 14 in Robertsganj. The urban centres noted for extreme proportions on the highest and lowest sides are small towns of the region. Based on the proportion of such workers the urban centres of the region have been categorised and their representation has been made in Fig. 54.

The distribution of the working population according to the main activity so far discussed in detail in respect of Eastern Uttar Pradesh clearly points out the fact that this region is a predominantly agricultural one. Even after 25 years of planning, the economic structure of this region as well as the level of living of its people have not been much improved.

EASTERN UTTAR PRADESH TAHSILS & TOWNS WITH THEIR WORKERS ENGAGED IN OTHER SERVICES 1971



FIGNO 54

So this densely populated part of Uttar Pradesh has remained one of the backward regions of this country. Agriculture is the most important sector of this region's economy but it has not been fully developed so far and hence the level of land productivity is less in this region than in the western part of this State. The cropping pattern is heavily set in favour of the food grains and low value crops. Barring sugarcane, this region has practically no commercial crop of significance which could form the base of a large scale manufacturing industry. The process of industrialisation has not gained much momentum in this region. Thus its economic structure is mainly based on agriculture and hence the occupational distribution of population of the Primary Sector is largely set by agriculture and its allied activities. The Secondary and Tertiary sectors engaging 6.5 percent and 9.4 percent respectively of the total working population of the region are not so developed as to strengthen its economic structure ^{which is still} mainly based on the economic activities of ^{The} Primary Sector.

CHAPTER IX

PROBLEMS, PLANNING AND PROSPECTS

CHAPTER IXPROBLEMS, PLANNING AND PROSPECTS9.1. General:

Eastern Uttar Pradesh like rest of the country completed its twenty four years of planned economic development in March 1978 since April 1951 when the first Five Year Plan was started. This period includes fifteen years of the first three Five Year Plans, three years of pause in planning from April 1966 to March 1969 and also five years of the Fourth Five Year Plan and four years of the current running Fifth Five Year Plan for economic development. These plans were formulated and executed on the basis of the broadbased objectives laid down by the Planning Commission of India with a view to increasing the national and per capita income of the country and also for providing more and more employment opportunities to the people.

The First Five Year Plan aimed at the rehabilitation of the economy of the country from the damages of the Second World War, famine after effects and the partition dislocations and also for building up new institutions which would help our economy to grow in desired directions. The Second Five Year Plan sought to carry out these aims by furthering the rate of economic growth and initiating the new strategy through which the Plan could assist the country in bringing out such structural changes in its economy as seemed necessary for fulfilling the long-term objectives of the country. The First Five Year Plan aimed at agricultural development but the Second Five Year Plan

was oriented towards industrial development of the country. The Third Five Year Plan aimed at the intensive development of our economy for making it a self reliant and self generating economy. It also sought to ensure social justice by affording a minimum level of living to every citizen of the country and by narrowing economic and social disparities within the country. Thereafter three annual Plans intervened between the Third Five Year Plan and the Fourth Five Year Plan² and they were in fact a little pause in planning. The "Fourth Five Year Plan aimed at maximising employment opportunities compatible with the proposed growth rate and as far as practicable to hold the backlog of unemployment at its present level, if it be not possible, to reduce it".¹ The Fifth Five Year Plan commenced in April, 1974 and will be completed by March, 1979. It aims at consolidating our gains of the previous plans and widening our sphere of activities.

Thus the expansion of region's economy through various development schemes launched during the different Five Year Plans has always resulted in the increase as well as diversification of the employment opportunities in the region. An attempt has already been made in the previous chapters to analyse the progress of employment in different sectors of our economy in this region by comparing the statistical details in respect of the occupational distribution of population for the year 1971 with those of 1951 and 1961. This pattern of occupational distribution of population when analysed properly, brings forth to light some salient features our economy and certain characteristics of population of the region which are in fact

products of the socio-economic and politico-demographic conditions prevailing in the region.

9.2. Salient features of occupational structure of Eastern Uttar Pradesh:

The first aim of this chapter is to sum up the salient features of the occupational distribution of population of the region which is mainly set by the agro-based economy. A rapidly growing population, and the mass illiteracy have caused a high rate of unemployment in the region. The second aim of this chapter is to suggest and formulate the ways and means to be undertaken as positive measures to solve the problems of the existing distribution of working population in the region which is mainly biased in favour of agriculture and its allied activities and also to suggest steps to tackle the problems of underemployment, disguised unemployment and unemployment so as to accelerate this region's economy in such a way where men and women willing to join the labour force may be gainfully employed in accordance with his-her physical and mental efficiency, education and training and capabilities. For the sake of clarity of discussion and understanding the salient features associated with the occupational structure and distribution of population of the region showing the caste structure society of the rural economy of Eastern Uttar Pradesh, as analysed in earlier chapters, would be summarised under the following heads:

(i) Low percentage of working population; (ii) Mal distribution of working population by occupations; (iii) Underemployment in agriculture and allied sector; (iv) Participation of non-effective

population age-groups in the labour force; (v) Low rate of female participation in the labour force; (vi) Rural-urban composition of working population, and (vii) The fast growing population of the region and vast unemployment.

(i) Low percentage of working population:

According to 1971 census, only 31.30 percent of the total population of this region could be accounted for as the working population. This low proportion of the working population is much below the average for India and the advanced countries of the world. The proportion of working population in the same year was 52.09 percent in Nagaland, 41.68 percent in Andhra Pradesh, 37.30 percent in Madhya Pradesh and in Maharashtra, 36.82 percent in Himanchal Pradesh, 36.67 percent in Tamil Nadu and 35.17 percent in Karnatak.* All these percentages were much ahead of Eastern Uttar Pradesh.

Even this low proportion of the working population of this region varied widely at the District level, ranging from the maximum of 35.2 percent in Basti District to the minimum of 26.8 percent in Jaunpur District. This working population has also to support the non-working population whose proportion in the region is quite high varying widely from one District to another. Therefore, the 'Dependency Ratio' in this region is proportionately much higher than this state and many other parts of India. This clearly indicates the poor economic conditions

* Census of India, 1971- Series-I: INDIA-Paper I of 1971, Supplement Provisional Population Totals, pp. 60-61.

of the people living within the limits of Eastern Uttar Pradesh. The participation rate of 31.30 percent of the region compares much unfavourably with the advanced countries of the world, such as Japan (49.00 percent), West Germany (47.00 percent), United Kingdom (46.00 percent), Yugoslavia (45.00 percent), France (41.00 percent), U.S.A. (40.00 percent) and Canada (35.00 percent)*. Higher the Dependency Ratio, lower is the efficiency of the economy of a region or country and even lower is the per capita income of that region or the country.

The labour force of this region is much oriented in favour of agriculture and its allied activities and hence the participation rate in other sectors was very much lower."Eastern Uttar Pradesh comes under the Eastern economic zone (A) with its per capita income of Rs 206/- annually consisting of all the Districts of the region except those of Varanasi, Mirzapur and Allahabad which together formed the Eastern Economic Zone (B) with Rs 319/- as its per capita income yearly"**.

(ii) Mal distribution of Working Population by occupations:

Along with a low participation rate and lower per capita income, the working population of the region is not well distributed among the different sectors i.e. the Primary, Secondary and Tertiary Sectors. It is rather very much ill-distribution in the region. The agriculture and its allied

* The participation figures for the important countries of the world are for the year 1965.

** Techno-Economic Survey of Uttar Pradesh, Ed. 1965, p.13, Per capita incomes relate to 1955-56 at 1960-61 prices.

activities forming the Primary Sector alone accounted for 84.1 percent of the working population of the region, the Secondary and Tertiary Sectors being credited with 6.5 percent and 9.4 percent respectively. Such an ill distribution of working population clearly points out the poor economic growth under the Secondary and Tertiary sectors. It, however, shows a broad base of agriculture. The whole economy is less or underdeveloped in the region. Simon Kuznets has estimated the proportion of working population under different sectors of economy in an underdeveloped region: 56.4 percent in agriculture and allied activities, 26.00 percent in services and 17.6 percent in industry. The existing division of the working population in this region does not compare with the above estimates. However, the pattern of the distribution of working population, in this region shows that the Primary Sector is the most predominant followed by Tertiary (services) and Secondary (industrial) Sectors respectively.

There is a close relationship between the division of the working population into different sectors on the one hand and the per capita income on the other. As Colin Clark argues "a high average level of real income per head is always associated with a high proportion of the working population engaged in Tertiary, industries--- low real income per head is always associated with a low proportion of the working population engaged in tertiary production and high percentage in primary production".² Some empirical evidence in this regard is given in Table IX-1.

Table IX-1

Per capita income and proportion of active population engaged in agriculture in selected countries of world, 1965

Country	Per capita income (in U.S.A. Dollars)	Proportion of active population engaged in agriculture
	\$	%
U.S.A.	2,893	06.00
U.K.	1,451	04.00
Australia	1,611	10.00
Canada	1,831	11.00
West Germany	1,510	11.00
France	1,438	18.00
Japan	696	24.00
India	89	70.00
Pakistan	87	68.00

An examination of the above table reveals that a higher per capita income is inversely correlated with the proportion of active population engaged in agriculture. The advanced countries like the U.S.A., the U.K., Australia, Canada, West Germany and France with a low proportion of active population dependent on agriculture reveal a higher per capita income. As against this, the developing countries like India and Pakistan with a higher proportion of active population engaged in agriculture have very low per capita income. These figures pertaining to the year 1965 corroborate the findings of Colin Clark. The above discussion explains the reasons for a lower per capita income in Eastern Uttar Pradesh where 84.1 percent of the active population is engaged in agriculture and its allied activities. The hard pressed agricultural sector coupled with its low productivity per acre has retarded the economic growth of the

region which is facing the acute problem of underemployment.

(iii) Underemployment in Agriculture and allied sector:

The problem of unemployment and underemployment has taken alarming proportions over the years. This problem is quite serious in rural areas due to the growing non-engagements of landless labourers, manual workers or artisans. The problem of unemployment in agriculture also depicts itself in the form of underemployment and disguised unemployment in addition to the total unemployment in the sense of being driven out of traditional jobs without getting new jobs. The underemployment is caused by two major factors: (1) the seasonal underemployment, and (2) the chronic underemployment peculiar to agricultural production, since agriculture itself is a seasonal work. It may be in disguised or visible form. "The chronic unemployment means the present supply of agricultural labour exceeds the supply required to produce the present output with existing methods of cultivation and organisation".³ These two forms of underemployment have developed in an acute form in the region of Eastern Uttar Pradesh. The seasonal nature of agricultural activity is a universal phenomenon. Its adverse social and economic effects are much serious in the developing or less developed regions or the countries of the world.

Besides the seasonal unemployment, there is another crucial problem of redundancy of agricultural labour, very often in the form of disguised unemployment in relation to the area cultivated by them. This problem is created mainly due

to the rapid growth of population when the cultivable land cannot be expanded and there are lesser opportunities of gainful engagement of persons outside the agricultural sector. The magnitude of this chronic problem is quite vast in this region which is noted for a fast growing population, particularly during the recent decades.

Apart from these two main forms of seasonal and chronic underemployment, which surely exist in our agriculture, there are other forms also like frictional and technological unemployment which figure insignificantly in traditional agriculture but are quite visible with its modernisation. Frictional unemployment is caused by mal-distribution of skill and its requirement and it is almost absent from our agriculture which is being conducted even now largely on traditional pattern in this region. It may create serious problems in future with the advancement and modernisation of agriculture in the region.

Various surveys and estimates have been made regarding the extent of unemployment and underemployment of agricultural labour. The number of days required to cultivate a unit of land depends on the crops grown, irrigational facilities available, double cropping practised, the methods of cultivation and many other factors. On the whole, the agriculture provides a gainful employment only for a limited period in a year and so it is a part-time activity. According to the Farm Management studies conducted by the State of Uttar Pradesh, the productive engagement of the farmers showed a variation from 265 days to 280 days in a year in this state. However, a proper and

reliable estimate of the incidence of underemployment is not possible for various obvious reasons. According to a rough estimate of economists of repute as much as 25 percent of the workers engaged in agriculture are not gainfully employed and are really superfluous in this region. Their contribution to the agricultural productivity is almost nil. The problem of unemployment is further complicated because of (i) the participation of the persons of the non-effective population age group, and (ii) as a consequence the non-participation of many persons of the effective population age group due to the drift by the former.

(iv) Participation of non-effective population age-groups in the labour force:

The analysis of the working population by age-groups points out the extent and magnitude of participation of the non-effective population i.e. children upto 14 years of age and old and retired persons of 60 years of age and above in the labour force of the region of Eastern Uttar Pradesh. According to 1971 census, of the total working population of the region, 16.1 percent belonged to the age groups of non-effective population, out of which the children upto 14 years of age constituted 5.5 percent and the persons above 60 years of age made up 10.6 percent. Such figures clearly point out that on an average out of every seven workers, one belonged to the non-effective population age groups in this region. Their participation in the labour force may not be desirable in a welfare state because for children this span of age is needed for schooling and

training and for the old and retired persons, the advanced age requires them to have rest and take care of their health. However, it is under a great economic strain that such a high proportion of the working population hailed from the non-effective population age groups in order to earn a livelihood or to supplement the family income. A part of workers (mainly females) of the effective population does not participate in the labour force and thus the utilisation of the human resource is retarded. This leads to a low productivity of the region and a lower per capita income. The low participation rate of females is a characteristic feature of the occupational distribution of population of this region and therefore, it needs further elaboration.

(v) Low rate of female participation in the labour force:

The low female participation in the labour force of this region is due to the adverse social, culturo-economic and demographic conditions prevailing there. As low as 9.1 percent of the total female working population of the region joined the labour force and contributed to its productivity as compared to 52.00 percent in the case of the male workers. The factors responsible for such a low participation rate of females are many social restrictions which limit their choice in joining the labour force. Females are mostly required to live within the premises of their houses, to cook food and to take care of the children and other members of the family. The structure of our society is such that it does not permit them to join the labour force freely.

However, under the modern social transformations, the society is undergoing a change and so the social restrictions are fast vanishing. But it will certainly take some decades for females to come up at par with their male counterparts in the society, particularly in this region, where the social restrictions are very rigid.

(vi) The rural-urban composition of working population:

The rural-urban composition of the working population reflects the economic structure and also the occupational structure of population of a region. "It is a truism that economic development is associated with the growth of urbanisation. Some writers go so far as to assert that the acid test of development lies in the shift of population from rural to urban areas".⁴ Lesser the urban population, lower is the diversification of economic activities. This region is less urbanised as compared to other States of the country and many countries of the world. The urban population which accounted for 7.06 percent of the total population of the region in 1971, ranks low among the states of India as shown in Table IX-2.

Reasonably a direct positive correlation seems to exist between the degree of urbanisation and the per capita income. A higher per capita income tends to be correlated with a higher percentage of urban population. Similarly a higher proportion of urban population is found in advanced countries of the world noted for higher per capita income. The table IX-3 provides

the details of the degree of urbanisation in some selected countries of the world.

Table IX-2

Percentage distribution of urban population and per capita income in some of the States of India, 1971

Name of the State or Country	Percentage of urban population	Per capita income in Rs
Maharashtra	31.16	739
Tamil Nadu	30.25	593
Gujrat	28.07	746
West Bengal	24.74	705
Punjab	23.73	1002
Bihar	10.00	405
Assam	8.87	588
Orissa	8.41	546
H.P.	6.99	725
U.P.	14.02	495
India	19.87	589

Note: The per capita income figures relate to the year 1969-70 at 1960-61 prices and the percentages of urban population to the total population are for the year 1971.

Source: Census of India 1971 and FCCI planning for Results, 1972, p. 44.

Table IX-3

Degree of urbanisation in some selected countries of the world⁵

Country	Year	Proportion of urbanisation (%)
U.K.	1968	78.9
Canada	1966	73.6
France	1968	70.0
U.S.A.	1960	69.9
Japan	1965	63.1
U.A.R.	1969	41.6
Pakistan	1961	13.6
India	1971	19.8

An examination of the figures regarding the details of the degree of urbanisation and per capita income reveals the fact that next to Pakistan the minimum urbanisation is noted in India. This means lesser diversification of economic activities of urban areas and the predominance of non-urban functions in India. Urbanisation and industrialisation usually go together and the growing urban population means a changing economy, which in turn brings a change in the occupational structure. The growth of urbanisation necessarily implies the shift of persons from villages to the urban areas in search of urban jobs, which are more gainful as compared to the rural functions. Thus the urban functions are quite different from the rural functions because an urban centre is a contradiction to a rural settlement, because it has a large number of its inhabitants engaged in industrial and non-agricultural activities. In addition to the jobs, such facilities as transportation, banking, commercial, technical, community and civil services are easily available in urban centres. The degree of urbanisation, however, varied widely from one District to another in the region.

Thus the proportion of urban population to the total population of a region determines to a great extent the level of economy of that region and hence also the occupational structure of population of the region. Besides the underemployment, the participation of persons from the non-effective population age-groups in the labour force and the less urbanisation of this region. The problem of unemployment is also due

to the fast growing population of the region.

(vii) Fast growing population and vast unemployment:

During the post independence period, the population of this region has been fast growing as it witnessed 13.89 percent and 17.31 percent growth during the periods 1951-61 and 1961-71 respectively. Thus it is adding rapidly to the existing problem of unemployment, underemployment, and frictional and technological employment, making the problem more acute every year. Therefore, the problem of providing gainful engagement to all the males and females of effective population age-group (15 to 60 years) willing to join the labour force in the region in its rural as well as urban areas has been a cause of serious concern to the Government and the people in recent years. The emergence of considerable unemployment even among the educated and skilled persons such as engineers and technicians has added a new dimension to the problem.

The fast growing population works as a retarding factor to the economic development of a region, because it affects adversely the per capita income and the food supply, and increases the burden of unproductive consumers. It enhances the magnitude of unemployment and reduces the budget provisions for educational and medical care and retards the process of capital formation.

9.3. The nature and dimension of the problem:

However, the dimension, size or magnitude of the problem

is based upon surveys and estimates only and so the proper and reliable depth or trend of the problem is not correctly assessed in absence of more reliable data. In advanced regions having nearly full employment, there may be cyclical unemployment on account of trade depressions and the frictional unemployment caused by changes in technology and consumer preferences. There may be seasonal unemployment due to the seasonal nature of some industries. But in India in general and in this region in particular, the problems of unemployment and underemployment are indeed very chronic because of the low level of development due to the low productivity, low saving and low investment.

In the prevailing situation, the worst sufferers from the unemployment are the landless agricultural and non-agricultural rural labourers because more than 80 percent of the population is directly or indirectly dependent on agriculture. In urban areas the casual workers, the skilled or semi-skilled technicians, the engineers, the educated middle class persons etc. are seeking white collar jobs in large numbers. Many of them remain unemployed and hence they add to the job-less working force of the region. In all these categories persons in the lowest social and economic strata suffer the most. Now one has to face the two fold problem: (i) the problem of unemployment; and (ii) the problem of changes and adjustments in the occupational structure. Both the problems are so much interlinked that one cannot be isolated from the other for a balanced development of this region's economy.

The basic nature of the unemployment has taken different forms at different times, for example underemployment, disguised unemployment, open unemployment etc. Besides, there are special problems of unemployment e.g. seasonal unemployment, educated unemployment, frictional unemployment, technological unemployment etc. as elaborated below:

(a) Underemployment: In this situation the employed persons although contribute to the production but in a lesser degree than they are capable of. For example, a degree holder in engineering if for want of job starts a low paid work, he may be said to be underemployed although undoubtedly he is engaged in a production activity and in this sense he is contributing something to the field of production. But in reality he is not gainfully and fully engaged according to his capabilities or full capacity. He is, therefore, underemployed.

(b) Disguised unemployment: This refers to the unemployment which is not visible or on the surface but is concealed. For example, in our villages where most of the unemployment exists in this form, people are found apparently engaged in agricultural activities in one way or the other. But such employment is mostly a work-sharing device in or outside the family because the existing load of work is shared only however large may be the number of workers. In fact the same work can be performed by fewer people and many of the workers can be withdrawn from it. It follows that all the workers are not required to maintain the existing level of production. Therefore, the contribution

of such workers to the total production is negligible. The contribution made by such superfluous workers to the field of production may be even negative. The disguised unemployment prevailing particularly in agriculture and its allied activities in this region is increasing in its dimension year after year with the fast growing pressure of population.

(c) Open unemployment: This refers to those unemployed persons who are willing to join the labour force and are able to work but have no jobs to perform. They are to be found partly in rural areas but largely in urban centres. Such unemployment can be counted in terms of the number of such persons. Most of them come from the villages to the urban areas in search of jobs and some of them originate in the cities themselves. Therefore, the open unemployment is different from the under-employment and the disguised unemployment in the sense that in case of the former, the workers are totally idle, whereas in the latter two cases, they appear to be engaged, although not gainfully.

(d) Seasonal unemployment: Such unemployment is associated with the seasonal work of the year. It is a widespread phenomenon in rural areas, mainly associated with agriculture and its allied activities which are largely dependent on nature. In certain seasons of the year, there is a heavy load of work, while in the rest, the work is lean. Most of the workers are engaged in sowing and harvesting of crops and they are to a large extent idle during the post or pre-sowing and harvesting

periods. So many of them remain without work during these periods.

(d) Educated unemployment: This form of unemployment is linked with the educated persons who are without jobs in rural as well as urban areas. Some of them may be underemployed or suffering from disguised unemployment. In the latter form of unemployed, the persons may not be getting work according to their efficiencies, capabilities and qualifications so as to enable them to make full use of their abilities. Educated unemployment has taken alarming proportions during recent years, particularly in the urban areas of this region.

(e) Frictional unemployment: Such form of unemployment is a characteristic feature of the developed economies, because they push towards further development. In this situation, it is desirable that such workers should move from one industry to another, leaving those functions which are decaying and joining those which are leading and rising. This is the way to further growth which promises higher wages and rewards. In between the time of leaving a job and joining a new function, if a worker gets no engagement and he remains without a job, then such unemployment is called the 'Frictional Unemployment'. In fact such an unemployment is a necessary price for the growth and progress. In Eastern Uttar Pradesh, it does not exist to the extent that might cause some concern to the Government or the people of the region.

9.4. Planning and Unemployment:

Since the last census (1971), three years of the fourth Five Year Plan and a few years of the fifth Five Year Plan of development have made some significant impacts on the economic structure of the country but no meaningful change in the occupation structure of population of this region has been noticed. 'The Fourth Five Year Plan (1969-74) has unfortunately evaded the vital and explosive issue of employment under the pretext of unreliability of available statistics'⁶, except that it has stated in general terms that 'a major objective of the plan is to create more employment opportunities in the rural and urban sectors on an increasing scale'⁷.

The draft of the Fifth Five Year Plan (1974-79) stated at the very outset that the "Removal of poverty and attainment of the self reliance are the two major objectives so that the country has set out to accomplish in the Fifth Plan. As necessary corollaries, they require higher growth, better distribution of income and a very significant set up in the domestic rate of saving"⁸.

An approach document of this plan mentions that the "country has entered a period of labour force explosion.... even if family planning begins to show spectacular results which it has not done so far, its impact on additions to the labour force will be felt only after 15 to 20 years. Consequently expansion of productive employment opportunities is crucial to accelerated growth and reduced inequality. Idle manpower, the unemployed, the underemployed and the very thinly employed is a

vast potential resource for development. If utilised it could give a powerful stimulus to growth"⁹. Even after realizing the need for creating more jobs, the planners have not prepared an estimate of the additional employment to be generated or a number of man days of employment to be created in the rural or urban sector but they have used phrases like the following: "The fifth plan envisages substantial additional opportunities for wage employment in the non-agricultural sector----. Expanded, fuller and more productive self employment is anticipated in agriculture, cottage industry, road transport, trade and service sector"¹⁰.

The new Janta Party Government took over in March 1977 the administration of the country with the promise to the people to provide opportunities for gainful engagement to all the eligible male and female workers of the country willing to join the labour force and to contribute towards the national production and as they are not convinced of aims, objectives and priorities of the Fifth Five Year Plan as planned and being executed by the previous Government, therefore there was a move to terminate the Fifth Five Year Plan by a year in advance. "Both the Government and the Planning Commission are now considering whether the current Fifth Plan could be terminated in March 1978, one year in advance"¹¹. This move according to the informed sources stems from the Government's desire to reflect in the planning process its new priorities in agriculture, irrigation and employment. "Subsequently the Planning Commission decided to introduce one year Rolling Plans to enforce the priorities

to agriculture, irrigation, small scale and cottage industries"¹².

The nature of unemployment in this region as well as in this country is characterised by the dominant trait of the problem that it is rooted on the broad base of supply of labour force but of inadequate productive capacity, largely due to capital deficiency. "It thus fits in the classical approach which would view the question of employment creation as primarily a problem of accelerated capital formation"¹³. Unemployment and underemployment are chronic problems. They are as acute as widespread. They have become the pressing and perennial problems of our economy. Planners, policy-makers, administrators, economists and legislators have found the problems of unemployment and underemployment quite intractable and insurmountable over the years. While we continue to wallow in our analysis and anxiety, the problems relating to and arising from the unemployment and underemployment have assumed increasingly intimidating proportions.

These problems now pose a challenge as they have baffled the social scientists and the policy makers to probe them in depth. They are not merely the economic or technocratic problems but indeed such problems which call for pooling of all our intellectual and physical resources and the marshalling of our will and determination to solve them. The survival of our people, the prosperity of the region and the country, and the performance and capabilities of our political and legal system depend in a large measure on our ability to reduce unemployment and under-employment and to maximise our productivity and

optimise the tempo of rural reconstruction and industrialisation.

9.5. Magnitude of the Problems:

It is not enough to know only the nature of these problems. Even more significant aspect of the matter is the assessment of the magnitude of unemployment and underemployment so as to analyse the depth of these problems for the purpose of policy making and launching of plans for developing the resources with a view to reach their proper solutions. But in this respect we are faced with two sorts of difficulties. The first difficulty is that of assessing correctly the depth of unemployment and the second is that all the available estimates of unemployment are not based on uniform concepts and methodology and hence it is difficult to know as to which method is more convincing. For example, in this region where the household economic organisations predominate in agriculture and also in many enterprises in the non-agricultural sector, it is not possible to distinguish between persons who perform economic activities and those who do not pursue the same. In the service sector, as also in the non-service sectors, quite a large part of employment is not so much as means of earning a livelihood than as a sort of service rendered in return for a subsistence level of consumption. All these make it difficult, if not impossible, to draw a distinction between unemployment and underemployment.

Many estimates of unemployed persons have been made from time to time during the period of planned economic development, but the figures obtained are not reliable. Several

estimates have also been made for the prospects of providing employment to the people, but such figures could not serve any useful purpose on account many reasons. In this regard Prof. Dantwala has indicated that the magnitude of unemployment is so wide that entire problem cannot be studied in a consolidated manner. He opined that the extent of unemployment should be estimated separately in accordance with the age, sex, rural, urban, socio-economic conditions of the unemployed and his education. It is on this basis that the magnitude of unemployment can be studied somewhat correctly. It was further suggested that the "most which can be attempted by way of estimation is the likely growth of employment in few segments of our economy and for the rest, reliance has to be placed primarily on recording, at frequent intervals, the changes which may be taking place in the composition of the labour force, its industrywise distribution, the wage rates for different types of labour, the intensity of employment and the members seeking the employment"¹⁴.

The earlier practice of the Government and the Planning Commission to provide information on the backlog of unemployment, new entrants to the labour force and the employment created under the plans was discontinued from the commencement of the Fourth Five Year Plan because of the unreliability of such data. Before the suggestions and measures to be undertaken in the years to come are put forward, it is worthwhile to find out the causes responsible for the widespread problem of unemployment and underemployment prevailing in the region. The major causes can be conveniently categorised into the following subheads:

(i) Underdevelopment, (ii) Defective Planning, and (iii) Fast growing population.

(i) Underdevelopment:

This refers to the vast and varied unutilised natural resources as also the manpower. It is an obvious fact that the economy of this region, by and large, continues to be in the state of comparatively more underdeveloped than in various other regions of the country. The volumes of economic activities of this region are largely determined by agriculture, which has a slow rate of growth. The non-agricultural sector, in particular the modern industrial sector, which was to provide increasing avenues of employment, is also growing at a quite slow rate. This characterised our economy even before independence. During the British period, the flourishing indigenous small scale and cottage industries of this country were destroyed. After independence, the actual performance in the industrial sector also fell far short of the plan targets and needs. Thus the slow capital formation inhibited the growth of potential activities both in the agricultural as well as the industrial sectors. Such a situation has adversely affected the expansion of employment opportunities in this region as also in this country.

(ii) Defective Planning:

Planning in operation since 1951 has not also contributed adequately to the solution of the unemployment problem. This has so happened because of the neglect of employment and the under

rating of human resources.

Employment never formed an integral part of planning strategy of this country in the sense that this objective was never quantified as a time-bound programme. Neither was this objective mentioned in precise terms of full employment even in long term perspective plans, nor was there ever what can be described as employment oriented planning. Further, very little has been done to utilise the Narkusion variety of labour surpluses in rural areas. Excepting the early stages of the Community Development Programme and the last year of the Fourth Five Year Plan and the early years of the Fifth Five Year Plan, when a few public work programmes came into picture in the villages, there was no attempt for a consistent and comprehensive programme of utilising the vast human resource of this country to build assets for the nation.

The defective balancing of the needs of manpower and its supplies in the various sectors of productions and skills, may be added to this overall inadequacy of planning. In some sectors of economy, there is more supply of manpower than the need, while in many others, its supply is less than required. Such an imbalance has largely arisen in the cases of educated, trained and skilled personnel, such as engineers, doctors, teachers and the skilled and semiskilled labourers.

(iii) Rapid population growth:

The fast growing population of the country, particularly

since 1951, has adversely affected the unemployment situation in the country in two ways. In the first place, it has directly affected by addition to the labour force and in the second place, the rapid population growth has worsen indirectly the unemployment situation by reducing the resources available for capital formation. Any rise in population means a large additional expenditure on its rearing, maintenance, education etc. Thus, the fast growth of population has created many hurdles in the way of a rapid growth of our economy and has retarded the growth of job opportunities also.

9.6. Planning and Prospects:

An understanding of the salient features of the occupational distribution of population in Eastern Uttar Pradesh in the post-independence period and the analysis of the dimension, nature and magnitude of the unemployment problem and the causes responsible for the same are vital for formulating and suggesting an appropriate employment policy and for outlining the measures to be undertaken by the Government for reducing this dragonian problem existing over the years. The eradication of this evil of unemployment which is eating into the very vitality of the region's economy must be aimed at and pursued vigorously for a bright future.

A perfect and ideal occupational pattern would require that each individual should have the opportunity for the full development of his ability. It is desirable that the available manpower be utilised in industry or other occupations in

accordance with the ability of each individual and the requirement of each job and that an employment be assured to each man and woman willing to join the working force. We have already adopted in our Constitution the Directive principles of State Policy indicating that the citizens have the right to adequate work. This can be guaranteed only under the conditions of full employment. Thus, among the fundamental objectives of a well set occupational distribution of population in the region, the following may be described as very significant¹⁵:

- (i) Maximising the potentialities of each person of mature Age: Steps should be taken for attaining the utmost out of his talent, skill and other individual capacities by his proper education and suitable employment thereafter;
- (ii) Efficient conservation and utilisation of manpower: This means that the manpower should be employed wherever it can make the greatest contribution and that it must not be stock piled like other commodities;
- (iii) Maximisation of production and prevention of waste: This can be done by a judicious combination of the four main factors of productivity i.e. $N \times S \times T \times R$; ¹⁶ and
- (iv) A High Level of Employment: This may be achieved by preparing in advance the manpower utilisation schemes, showing the anticipated volume and distribution of national manpower in relation to the anticipated volume and distribution of demand for it.

The problem of ideal distribution of manpower into different sectors of economic activity became more significant during and after the second World War, because the economic structure of the country was much paralysed. Therefore, for the first time to rehabilitate the economy in a short time with limited material and human resources available, the planners had to think in terms of ideal occupational distribution of population. But in fact no pattern of occupational distribution can be treated as ideal, because with the same pattern existing in different regions and countries, different levels of income and production growth have been achieved and also with the existence of different occupational patterns in different countries, the same level of income growth and production have also been attained.

Planning is really a directed, purposeful and short-cut way of attaining social and economic ends by fixing preferences and priorities. It arises out of scarcity and slackened economic growth which require the promotion and channelisation of natural and social resources in such a way that a reasonably large measure of progress is achieved within a short span of time. Right from the First Five Year Plan, the significance of solving this crucial problem of unemployment has frequently been stressed. Latest in series was the Draft Fifth Five Year Plan, which opened its 'Employment, Manpower and Labour Welfare' chapter with words 'The importance of providing adequate and increasing employment opportunities in our development programmes cannot be over emphasised',¹⁷. A point specially made here as if it was

presumptive of the past neglect was that a mere increase in the average per capita income could not by itself help achieve the objective of raising the standard of living, 'unless there is a reasonable assurance of suitable employment to every citizen, who has the capacity of being gainfully employed',¹⁸.

Apart from the objective of raising the standard of living, the aim of the redistribution of incomes was also woven with the frame of employment policy. On the reasoning that a major cause of inequality in incomes was a large scale unemployment and underemployment, it was emphasised that the most effective way to deal with it was to provide vastly expanded employment opportunities at reasonable income levels.

In view of the above aims and objectives, it is in the fitness of things to quote Mr. David Morse, Director General of I.L.O., who while receiving the Nobel Prize on behalf of his organisation, viewed the problem of unemployment in a world perspective, particularly in the context of developing countries, and said, "we shall try to contribute to the reduction or halting of the drift of population to the cities by making rural areas more attractive for the peasant, the agricultural labour and the artisan, through enabling them to earn a better living off the land and encouraging the growth of industries in the country side. We shall encourage the use of labour intensive techniques of agricultural and industrial production, wherever it is economically feasible to do so"¹⁹. These observations of Mr. Morse sum up most of the basic requirements of this region's development plans for the future.

Our development plans and programmes should be so envisaged and executed as to provide a new strategy of maximising employment potential and economic growth and hence these programmes should be so selected as to ensure full employment in rural as well as urban areas of the country. At least 10 percent of the growth and vitality of a region depends on the fearless, honest, and dedicated efforts of the men and women who reside in the region. Thus we need a dynamic and radical policy in the interest of the growth of a healthy economic structure. In respect of Eastern Uttar Pradesh, "an integrated area approach is indeed the sine quonon of any system of planned development. The entire purpose is to take an integrated view of investment, be it of capital, skill or labour so that different components of economic activity dovetail into each other. This is the only approach that can upgrade rural society as a whole and also avoid wasteful investment."²⁰

In view of the above approach, one should not follow up the concept of employment and unemployment of the western countries as the conditions in this region in particular and in this country in general are quite different from those existing in such countries. In this respect, it is worthwhile to quote Late Prof. P.C. Mahalanobis who observed in 1963 that, "The concept of employment and unemployment as used in the advanced industrialised countries are not meaningful in the case of household enterprises which constitute an overwhelming proportions of productive activities in rural areas in India and in other underdeveloped countries. A self-employed person

helping in a household enterprise can never be unemployed in the sense in which this concept is used in the industrialised countries"²¹. However, it is quite true that throughout the history of planned economic development in our country, we have neither been able to follow the integrated area approach nor the pattern of the west.

Sometimes we have to concentrate on certain components only in view of our short term needs. Some persons by virtue of their dominant position in society have appropriated to themselves the major portions of the gains of development. This has undoubtedly resulted in the uneven progress of various sections of our society. However, by and large efforts are being made to achieve multisided developments in the region. It is, therefore, necessary for all those concerned with the economic growth and full utilisation of natural and human resources to take an integrated view of the development of the area, so that maximum benefits can be derived from the large investments being made in agriculture and allied fields and in industrial activities in the region. Integration must be conceived of not only horizontally but vertically also. This implies institutional changes and innovative organisational pattern. A new administrative structure has to be evolved to suit this approach.

Regardless of the number of persons underemployed and unemployed in the region of Eastern Uttar Pradesh, for making the best use of our human resources in building the regional economy, there are perhaps three major areas in which action is urgently needed. They are as elaborated below:

(i) The first in the category are the unemployed and seriously underemployed persons in the rural areas. They are landless labourers, manual workers or artisans. For them various programmes of labour intensive rural jobs should be drawn up.

(ii) The next in the category are the half educated and half skilled rural and urban youths who have either reached the matriculation standard or have dropped out of schools and are either unemployed or underemployed. Most of them need further training in skills (agricultural or industrial), before they can be usefully employed in production processes or tertiary services.

(iii) The third in the category are the educated unemployed youths of the rural as well as urban areas including those with specialised education in medicine, engineering, science or teaching on whom the country has invested much by way of providing educational facilities and training in specialised fields. They must be employed suitably and gainfully.

It is quite true that a region's people are its assets. A massive use of manpower should be the cornerstone of any sound policy of economic development. Here it may be in the fitness of things to mention the strategy of a new policy conceived by Subramaniam Swamy. According to him "The new policy for generating full employment has to be based on two principles:

(i) Swadeshi (country made) and (ii) Vikendrikaran (decentralisation). As per this policy we should recast the plans in such a way that output from farms and factories to be pushed upto 10 percent rate of growth, instead of $3\frac{1}{2}$ percent; the domestic

savings are maximised, the employment potential is stepped up and the decisions are decentralised and kept out of the clutches of tried and discredited bureaucracy".²²

According to him principle of 'Swadeshi' will provide incentive to domestic or indigenous technology in small scale and cottage industries and to minor irrigation and nuclear developments which have three distinct benefits: (i) They will generate full employment and fast growth of per capita income, (ii) They will develop quickly the industrial base in rural areas; and (iii) They will provide more equitable income distribution, particularly increasing the incomes of artisans, peasants and underemployed and unemployed persons engaged in cottage and small scale industries as against the incomes of big industrialists and business magnates.

The principle of 'swadeshi' will also promote the principle of Vikendrikaran (decentralisation), because the small village and cottage industries and the minor irrigation works can be handled by the State Government and district administration by using the local manpower. Therefore, this new economic policy for full employment through the implementation of the processes of "Swadeshi and Vikendrikaran" will bring relevant modern technology to the doorstep of villages and do away with favouritism in bureaucratic decision making.

The above discussions regarding the spatio-temporal account of the occupational distribution of population and its associated salient features in Eastern Uttar Pradesh, the dimension and nature of unemployment and underemployment, and

the views of the economists of repute in this respect, bring to light the fact that the economy of this region in its rural areas hinges on agriculture and its allied sectors. However, for full employment in rural as well as urban areas of this region, the development of economic activities connected with agriculture along with the programme of industrialisation with a view to develop the village industries based mainly on the principles of swadeshi and vikendrikaran need not be over emphasised. Thus, the objective of economic development combined with employment policy should be adopted in such a way as to provide full employment and also to achieve the maximum regional income and output.

Before we list the measures (short term and long term) to be undertaken within the framework of the planned economic development programme of the region, it is imperative to mention here that the persons of backward, scheduled and other poor sections and the women folk from all the sections must find their preferential berth in the process of recruitment to various occupations. "Because the problem of relatively poor in India, who in absolute terms are very poor indeed and are also in general the socially disadvantaged (the scheduled) i.e. lowest castes or Harijans, the tribals, the urban derelicts, has often been talked about as an employment problem"²³. Thus, the planned economic growth with the provision of maximum employment generation should form the foundation stone of further planning in the region so as to strengthen its economic structure and to achieve a sound and healthy occupational distribution of population in different parts of the region.

9.7. Planning Measures:

For full employment of males and females willing to join the labour force, the process of development of agriculture and allied sector should go together with the process of industrialisation i.e. with the development of large scale, small scale, village and cottage industries. This is necessary because a large part of our labour force, that is, nearly 84.1 percent (as per 1971 census) found employment in the Primary or Agricultural sector. The various estimates of this region's labour force also reveal that during the present decade there will be a large increase in the labour force of the region engaged in this sector because other sectors would take many years to develop fully and to employ persons to the extent necessary to make a change in the occupational structure of the region. Thus, it is clear that the agricultural sector will continue to play a preponderant role in providing gainful occupation to a vast portion of the labour force in this region.

In terms of integrated area approach, the development of agricultural and allied sectors needs a truly multidisciplinary programme. The elements involved in the whole span of those activities, encompass the role of an agronomist, an irrigation engineer, a soil scientist, a cooperative expert, a banker, a salesman, a distribution agent a marketing expert, an economist, a geographer and ultimately a social scientist to integrate and coordinate the economic activities of the region for an integrated area development programmes in agriculture and allied sector.

Agriculture and allied sector:

An examination of the employment potential of the rural development programmes during the past two decades of our planned economic development indicates that irrigation (both major and minor), soil conservation, land reclamation, consolidation of holdings and construction of rural roads etc. would be the most labour intensive programmes and the widest productive sources of employment in future.

(i) Minor irrigation:

Among the development programmes, irrigation is the most essential for agriculture as it provides assurance of adequate water supply as and when required in the year for intensification of agricultural operations. Thus, the minor irrigation programmes which are quick yielding in their benefits and generate the largest amount of employment during their constructional as well as maintenance phases, would be an important constituent of the rural development programme. Besides, they have also an impact on the change of cropping pattern for more production. The provision of more irrigation in agricultural operations enhances the employment in three ways as below:

- (a) Firstly it increases the intensity of labour for most of the crops. The working group* has found that in the case of rice, labour days per hectare rose with the introduction of

* Report of the Committee on Unemployment, May 1973, Government of India, Ministry of Labour and Rehabilitation (Department of Labour and Employment), p. 119.

irrigation from an average of 94.57 to 116.32, that is a rise of 23 percent. Food grains occupy about more than three fourths of the gross cropped area in the region. The labour days of employment for an irrigated hectare under food grains would increase on an average by 80 percent i.e. from 55.06 to 100.08 mandays per hectare*.

(b) In the second place, it brings about changes in the cropping pattern in the region concerned. For example, many farmers would change over from the general crops to the high yielding varieties of millet, rice, wheat, cotton and cash crops. Such a change would increase the quantum of labour requirement per hectare on the farm. For example, the labour days required per hectare of irrigated jowar would be on an average around 63, those under rice about 116 and those under wheat nearly 104. With the introduction of irrigation, the switch over from jowar to rice in the kharif season and to that of wheat in the rabi season, would enhance the employment by 84 and 65 percent respectively.

(c) Thirdly with the introduction of irrigation the farmers can intensify their cultural practices through multiple cropping also. The multiple cropping would involve the cultivation of early maturing high yielding varieties of crops, the conservation of soil fertility, the judicious use of fertilisers, better tillage, manures, water facilities etc. All these are labour

* One man-year unit is taken comprising of 273 working days of eight hours each.

intensive programmes and are at the same time they will contribute to larger production and higher incomes. "Indian Agricultural Research Institute found that the intensity of cropping rises from 100 to 400 percent. The result is that the employment requirement would rise from 85 to 432 mandays per hectare and the production in terms of grains would increase from 5 to 14 tonnes per hectare".²⁴

Besides, the minor irrigation projects have several other benefits as well: (i) Since these works are located in and around farm sites, they can be taken up during the slack season in order to provide supplementing employment to the underemployed in the rural areas; (ii) Such works as installation of deep and shallow tubewells, dugwells, persian wheels etc. take comparative less time, involve less conveyance losses and result in quicker production; (iii) The cost of construction of minor irrigation works is usually lower than that of major and medium irrigation works; and (iv) Lastly such programmes attract substantial investment from farmers themselves from their own resources or through loans from institutional sources.

(ii) Soil conservation and Land Reclamation:

Another significant programmes having large employment potentials during their constructional phases are those of soil conservation and land reclamation. Such measures involve in the initial stages labour intensive engineering and construction works on an extensive scale which are also productive in nature. According to reliable estimates, such programmes help generate

the employment in the construction phase at the rate of 400 mandays of unskilled labour and 0.04 mandays of skilled labour.

(iii) Consolidation of Holdings:

The work of consolidation of holdings in this region has long been in operation and much progress has been reported in the matter. In the initial stages it provides employment opportunities to lesser number of persons in Tertiary sector but consolidated holdings promise large amount of employment potential for larger amount of per capita production because of the changes introduced by the holders of land in their cultural practices. It brings out a change in the cropping pattern and multiple cropping is resorted. Farmers are attracted to invest substantial resources for developing their holdings by making provisions for minor irrigation etc. Therefore, the labour intensive cultural practices are naturally introduced and they result into the larger productivity per hectare as against lower productivity on the earlier scattered holdings. Besides, they avoid wastage of agricultural land, more cost of agriculture, hurdles in the way of agricultural operations, under-utilisation of labour and capital, difficulty in personal supervision and lastly, the disputes and unnecessary litigation.

(iv) Multiple Cropping:

The programmes of minor irrigation, soil conservation, land reclamation, and consolidation of holdings provide employment in the constructional phase and they also provide opportunities for additional employment in the 'productional

phase by intensification of agricultural operations. Multiple cropping provides the full-employment to the members of the household cultivating their own farm and also give more employment to other agricultural labourers. The main advantage of the multiple cropping over the traditional practices in agriculture would lie in securing greater production from the same piece of land. Such intensive agriculture would require the maintenance of soil fertility at a high level by the judicious use of water, fertilisers, tillage practices etc. "All these practices would lead to an increase in the intensity of agricultural operations, thereby generating greater employment, rise in agricultural production, and enlarged incomes from the land"²⁵.

(v) Limited Mechanisation:

In the areas where multiple cropping is done, or where large farms exist, the mechanisation of some of the agricultural operations is being resorted to by an increasing number of farmers. This mechanisation could take various forms: from the use of diesel and electricity for pumpsets and tubewells, small mechanised appliances for improving the agronomic practices like seed drills, fertiliser planter etc. to the more sophisticated implements like tractors and threshers. In view of the underemployment and unemployment prevailing among the people of the rural areas, the use of some more sophisticated implements like reappears, harvester combines etc. should be avoided till the time when other means of occupations are developed, mostly in other sectors of economic activities in the region.

(vi) Dry farming in low rainfall areas:

Particularly in some portions of the Doab sub-region and the Southern Uplands where labour intensive capacity of such programmes would be more limited, other suitable measures should be taken to mitigate the intensity of unemployment in those areas, e.g. the additional development programmes such as rural road construction, animal husbandry, setting of small industries etc. which may provide the supplementary sources of employment and income. These programmes are suitable for all rural areas, but they have special significance for the dry farming areas and Southern Upland sub-region.

(vii) Diversification of agricultural occupations:

Besides, the programmes suggested earlier, it is necessary to adopt other measures to generate supplementary avenues of occupation for the rural labour force which suffers from the endemic incidence of underemployment. The new agricultural strategy has benefitted by the large the progressive and bigger farmers who could command the expensive inputs. This technology has, to a large extent, ignored the small and marginal farmers and agricultural labourers with the result that the income disparities in rural areas have been widened and social tensions have been created. For reducing such social tensions and in the interest of social justice, there is the need for such programmes which would specially benefit the weaker sections of rural community by providing them supplementary occupations and additional incomes.

(a) Animal husbandry and dairying:

One of the significant fields for diversification of agriculture is an extensive programme of cattle rearing and milk production, because there exists a considerable hiatus between the demand and supply of milk and milk products in the region. Such a programme, besides improving the nutritional content of the diet, would be a source of occupation for thousands of people in the rural areas all over the region. Besides, many other ancillary activities would also be developed like poultry farming, piggery and agro-industries etc. which are both market based and employment oriented so that the marginal farmers and agricultural labourers could increase their productivity and per capita income through them.

Such economic activities as indicated above would not only help in increasing the productivity and per capita income but would also provide the much needed employment in the Primary, Secondary and Tertiary sectors for operations like transport of the produce, industrial processing etc.

(viii) Construction of Rural Roads:

The programme of road construction in rural areas has great employment potential not only in constructional phase but also in the maintenance or continuing phase. A well-dispersed network of all weather rural roads would be a catalyst for the development of rural areas as it would help in the movement of goods and services and also open up rural areas for small industries and other economic activities. There would also be

more need to move the increasing volumes of agricultural produce from the rural to the urban areas for consumption of the urban population and also to the growth centres of the rural areas.

The programmes suggested above to be implemented during the years to come, would require the organisation and operation of efficient marketing arrangements and transport facilities link good roads etc. There would be need for construction of more roads, market yards, shopping centres, storage godowns and cold storages. All these activities would be labour intensive in constructional phase and also in their management, maintenance etc. which would also generate more employment opportunities on permanent basis, specially in Secondary and Tertiary sectors.

It would be in fitness of things to mention here that the weaker sections of rural community like small farmers, tenants, share croppers and land less labourers have by and large, remained untouched by the process of technological changes so far. Special efforts in terms of subsidy, loans and other assistance should be so extended to them as to improve their economic conditions. Some specific programmes specifically directed for improving their economic lot were undertaken in the recent past, but more vigorous efforts are required not only in increasing production from their small holdings but also in taking up subsidiary occupations like animal husbandry, poultry, piggery, vegetables and fruit growing for them. Other programmes like the crash scheme for rural employment, the Pilot Intensive Rural Employment Programme and the Drought Prone Area Programmes to provide employment to the unemployed and underemployed in

the rural areas are durable and productive steps of rural development.

It is quite evident from the above discussions that the following programmes may be undertaken to improve the position of unemployment in the rural areas through the various schemes of economic development: (i) Agricultural Production Programmes based on research and education; (ii) Drought Prone Area Programme; (iii) Minor irrigation projects; (iv) Soil conservation and land reclamation schemes; (v) Area Development Programme; and the plans for development of (vi) Forestry; (vii) Animal husbandry; (viii) Dairying and Milk supply; (ix) Fisheries; (x) Cooperation; (xi) Community work and Panchayat Raj; (xii) Crash scheme for rural employment; (xiii) Warehousing storage and marketing facilities; (xiv) Nutrition, Food processing and technology; (xv) Buffer stock operations; (xvi) Central support to financial institutions; (xvii) Major and medium irrigation schemes; (xviii) Flood control projects; (xix) Rural Roads; and (xx) Other miscellaneous programmes.

9.8. Besides, the programmes of employment generation and economic development particularly in the rural areas, under the Primary Sector, it is quite imperative to develop the industrial sector of economy of the region which ^{is} well known for its proverbial industrial backwardness in this country. Labour intensive household industries occupy a significant place in the industrial economy of the region and they contribute to a large extent to its industrial production. Therefore, it is beyond doubt to

accept that the household, small scale, village and handicraft industries have the vitality, strength and potentiality to compete successfully with the large scale industrial sector. The growth of such industries has, however, indirectly generated substantial employment in Primary and Tertiary sectors. Though the contribution of the industrial sector to the creation of direct employment is limited, yet its multiplier effects on other sectors, in which increasing numbers of labour force come to be employed in activities like agriculture, trade, marketing, commerce, banking etc., are of considerable significance.

For generating larger employment opportunities, both direct and indirect, it would be essential, (i) to accelerate the rate of industrial growth and (ii) to evolve a pattern of industries which will have the maximum employment potential not only in the manufacturing sector but also in such sectors of economy in which it may act through its multiplier effects on them.

Larger employment opportunities in the industrial sector could be generated even in the short term by accelerating the rate of industrial growth through increased production from the existing unused capacities as well as through fresh production from new investments. Some of the important factors responsible for the under utilisation of industrial capacity have been the inadequate supply of critical raw materials, the shortage of power, transport bottleneck, the depressed demand for certain items, unsatisfactory industrial relations etc.

But acceleration of industrial growth by itself may not lead to substantial increase in employment in the industrial sector. It is through the refashioning of the pattern of industrial growth that we can achieve adequate results in terms of additional employment. The industrial programmes in the large scale sector should be confined by and large to those items in which there are compulsions of technology and scale which have high employment effects, especially in the tertiary sector, in the form of distributive trade, commerce, transportation services etc. or where there is immediate need to augment the supply of mass consumption goods like textiles, edible oils, sugar, cement, chemicals, fertilizers and other such items. There is also need for a co-ordinated programme which closely integrates the small scale units with the large scale industries in terms of backward and forward linkages.

The small scale industries, if adequately developed, can play a vital role in the economic development as well as in providing substantial increase in employment opportunities. Apart from the lines of activities like production of engineering and electrical goods, chemical based industries, electronics etc. in which there is considerable scope for the development of small scale units, it is essential to emphasis the need to give particular attention to the development of agro-industries as the future strategy for the promotion of employment oriented small scale units.

Activities like the processing of agricultural and horticultural produce, utilisation of agricultural bye-products

and waste products, the activities supporting agricultural operations such as production of implements, fertilizers, pesticides etc., and the provisions of servicing facilities for the upkeep and maintenance of agricultural machinery and equipment like sprayers, pumping sets etc., are capable of being organised as small enterprises to absorb a good number of qualified entrepreneurs as well as skilled and unskilled workers in many semiurban and rural areas.

The manufacture of agricultural implements like simple threshers, diesel engines, small pump sets, and seed drills will not need capital intensive factories but could be manufactured at the local level in a more labour intensive and simple units which could be easily setup in rural areas.

The processing of products of occupations subsidiary to agriculture, for instance dairying, horticulture, pisciculture, forestry etc. could also generate sizeable employment. Such processing would include the canning and preservation of fruits, vegetables and fish, the chilling of milk, preparation of butter and cheese etc. Other important industries in this group are edible oils, flour milling, khandsari, confectionaries etc.

Another area in which employment opportunities could be enlarged is the development of ancillary small scale industries. For the establishment of such ancillary industries it is desirable that all the industrial undertakings manufacturing plant, machinery and other industrial goods, should be compulsorily asked to set apart such productions to small enterprises

as the components, spares, sub-assemblies etc. which are capable of being manufactured in the small scale sector. Even in the matter of certain processing and finishing jobs like the heat treatment, electroplating etc., small scale units should be allowed to function outside the premises but in the near by surroundings.

With a view to provide the employment opportunities for the gainful engagement of the people of backward areas nearer their homes, it is necessary to spread the setting up of small industrial units in semi-urban and rural areas, because the backward areas suffer more by the intensity and acuteness of the unemployment problem. Industrial activities are so far located in certain developed areas, leading to their concentration in a few pockets in the country.

Besides, the above measures, it is essential to develop the traditional village, cottage and handicraft industries which are labour intensive in nature and promise potentialities of employment generation. Most important among such industries are the handloom and powerloom works, the khadi and village industries, sericulture, carpet making, coir making, manufacture of bidis, handicrafts etc. The village, cottage and handicraft industries etc. are labour intensive enterprises in which it is the labour that gets the biggest share of income in contrast to the capital intensive units where the biggest beneficiary is the capitalist himself. This is a system in which an overwhelming percentage of the people can earn their own living- that is avail of their own means of production and are not dependent on any

one else for their living.

Moreover, while the amount of capital needed to increase production in small scale sector or in village, cottage and handicraft units is less, the number of jobs generated per rupee of investment in them is admittedly more. Also the establishment of an egalitarian society - a society where economic power is not concentrated in a few hands - can be more easily secured by adoption of labour intensive techniques which not only produce comparatively more but also employ more hands.

9.9. For the proper growth and development of ancillary, village, cottage and handicraft industries etc., the Government should come forward to help these units in numerous ways as they suffer from various difficulties of different nature. There is a need for greater coordination between the state financial corporations and the nationalised commercial banks to cut down the delays in the grant of loans extended to them. It would also be necessary that these agencies earmark additional funds for assistance to small scale, ancillary, village, cottage, household and handicraft units etc. to meet the higher requirements of production of this sector in the coming years. Further, the following facilities should be provided to these units with a view to have preference over large scale industries:

- (i) Necessary credit requirements, (ii) Adequate raw materials,
- (iii) Marketing facilities (through cooperative marketing agencies), (iv) Separate legislation, (v) Wage and workers welfare regulations, (vi) Consultancy services, (vii) Promotion

of self employment, (viii) Dispersal of such units in backward areas, (ix) Technological improvement, and (x) Better designed products. In any attempt to develop such units, the above points should seriously be taken into consideration and all possible help should be extended for the growth of employment oriented production programmes of such units and this would bring additional income mostly to the rural people of the region and to the workers in particular.

A summing up:

Based on the above discussions any one may be convinced that neither the western model of economic development through the growth of large scale industries nor the soviet model based on autarchy and regimentation as also on big industries is suitable for the development of Eastern Uttar Pradesh which is a region of floods, droughts, poverty and industrial backwardness in the country. The real remedy for the solution of under-employment and unemployment in the region lies in agriculture and they can only be solved by proper agricultural development.

A considerable proportion of the rural unemployed and underemployed labour force could be absorbed through adoption of various measures suggested above, such as the through multiple cropping system in irrigated areas, encouragement of new techniques in usar and reclaimed lands, promotion of integrated land use by suitable planning, an appropriate combination of agriculture, animal husbandry, fisheries and forestry in all areas, linking the farms with factories more closely.

There is a strong case for protecting the cottage and village industries against the medium and large scale industrial units. Following the ways and means suggested under Gandhian socialism, the main stress should be on simple labour intensive techniques and small scale "decentralised" production. In context of this region which has a subsistence agrarian economy, it may be said that the heavy or large scale industries could become in course of time the apex of an economic pyramid with agriculture, handicrafts, village and cottage industries at the base or in its body. The author is not averse to industrialisation. But he believes in its limited application. There is hardly any scheme of developing cottage industries in the official plans of this region since 1966 except few steps here and there. The carpet making industry of Bhadohi in this region developed under private sector has earned a world wide reputation. Similarly various other cottage industries should also be developed by the planners, administrators and entrepreneurs.

Under such a system of production, besides the agriculture being the major contributor to the economy of the region, the simple labour intensive techniques and the small scale decentralised industrial units should constitute the main pattern. As the distribution of income under this system favours the workers more, hence there can not be any scope for the growth of monopolies. Therefore, any sound policy for the socio-economic reconstruction of the society of this region should be based mainly upon the growth of agriculture with the adoption of new approach to planning and also with emphasis on employment

oriented production programmes in both the sectors of economy i.e. agricultural and industrial. Only such an approach would bring fruitful results to the people of this region so as to ameliorate their economic conditions. The economic structure and ultimately the desired occupational distributional pattern of population in the region should be so well set that the per capita income would increase and the dependency rates should decrease so that ultimately all the males and females willing to join the labour force could be gainfully employed in various parts of the region for a brighter tomorrow and better prospects for its people.

REFERENCES

1. Govt. of U.P.: Fourth Five Year Plan- A Preliminary Memo; p. 21.
2. Clark, Colin, 'The Conditions of Economic Progress, Ed.1940, p. 182.
3. Mathur, S.C. "Agricultural unemployment and Industrialisation" From the Book "Unemployment Problem in India" Ed.1977. General Editor Dr. L.M. Singhvi, Chapter 10, pp. 87-88. Published by the Institute of Constitutional and Parliamentary Studies.
4. Datt, Ruddar and Sundharam, K.P.M. Ed. 1976, Chapter 6 'Human resources and Economic Development'- See 'Urbanisation and Economic growth in India', p. 59.
5. Ibid., p. 52.
6. Kapuria, R.S. "The Problem of Unemployment - An over view": Chapter VIII. From the book "Unemployment In India", Ed. 1977, p. 74.
7. The Fourth Five Year Plan (1969-74), p. 20.
8. The Draft Fifth Five Year Plan (1974-79) published in 1973, p.1.

9. Towards an Approach to the Fifth Plan, 1972, p.1.
10. Ibid., pp. 3-4.
11. Northern India Patrika, Allahabad: September 4, 1977.
12. Northern India Patrika, September 10, 1977.
13. Agrawal, A.N. "Indian Economy", Ed. 1975, Chapter XI: "Unemployment", p. 147.
14. Comments are based on "Report of the Committee on Unemployment", (Govt. of India) under the Chairmanship of Prof. Dantwala. Other members of the Committee were Prof. K.N. Raj and Sri D.B. Lahiri. This committee was appointed by Planning Commission in 1968. The committee has recently come out with its recommendations.
15. Roy, Sheela, "Changing Occupational Pattern of Population in Uttar Pradesh", A Thesis approved for the Degree of Doctor of Philosophy of Allahabad University, 1972 (unpublished).
16. Agrawal, B.L. "Organisation of Manpower in India", Alld. 1961, p.2. Equation of Productivity by Prof. Wilber More: $P = \text{Total production}$, $N = \text{Number of employees}$, $S = \text{Skill}$, $T = \text{Time}$, $R = \text{Rate of output}$.
17. Draft Fifth Five Year Plan (1974-79), Volume II, p. 267.
18. Ibid., p. 267.
19. Draft Fifth Five Year Plan (1974-79), Volume II, p. 268.
20. Arora, R.C. "Development of Agriculture and Allied Sectors": Integrated Area Approach - Forward by J.J. Ram, Published in 1976.
21. Mahalanopis, P.C. "From the extract comments on rural unemployment surveys during N.S.S. Programme for 19th round, 1963."
22. Swamy, Subramaniam "Feasibility of Full Employment", Chapter IX, taken from the book "Unemployment Problem in India", Ed. 1977, p. 82.
23. Lewis, P. John "Wanted in India", A relevant Radicalism, The American Review, April 1970, p. 22.
24. Recent Research in Multiple cropping - India Agricultural Research Institute, New Delhi, 1972, pp. 115-121.

25. See:
- (a) Technical Report of the Division of Agricultural Economics and Statistics for the year 1970-71 by J.S.Garg, Professor and Head, U.P. Institute of Agricultural Sciences, Kanpur, pp. 42-45.
 - (b) Recent Research in Multiple cropping, Indian Agricultural Research Institute, New Delhi, 1972, pp. 115-121.

APPENDICES

APPENDIX A1

Scheme of occupational classification of population at 1971 census

In view of the sectors of economy in which the person is working may relate to the following classified list of economic activities according to the nature of Industry, Trade, Profession or Service.

Classified list of Economic Activities:^{*}

1. Agriculture, Hunting, Forestry and Fishing:

(a) Plantation Crops: The type of plantation such as tea, coffee, rubber, tobacco, edible nuts, fruits, ganja, betal nuts etc *are included in it.*

(b) Livestock Production: Kind of livestock reared such as goats, sheep, horses, pigs, ducks, bees, silk worm, etc. *are included* production of wool, raw silk, etc., are also covered in this.

(c) Agricultural Services: Type of agricultural service, e.g. pest destroying, spraying, operation of irrigation system, animal ^y shearing and livestock services (other than veterinary services), grading agricultural and livestock products, soil conservation, soil testing etc *are included*

(d) Hunting: It consists of hunting, trapping and game propagation for commercial purpose only.

(e) Forestry and Logging: Apart from planting and conservation

* Based on Census of India 1971, Series I, India, Part II-A(i) Ed. 1975; General Population Tables, Appendix III, Classified list of Economic Activities, pp. 28-30. .

of forests, felling and cutting of trees etc., this would cover production of fuel, gathering of fodder, gums, resins, lac, etc.

(f) Fishing: Sea, coastal and inland water, fishing, pisciculture, collection of pearls, conches, shells, sponges, etc.

2. Mining and Quarrying:

Mining and quarrying of such as coal, lignite, crude petroleum, natural gas, iron ore, manganese, gold, silver, copper ore, quarrying of stones, clay and sand pits, precious and semiprecious stones; mica, gypsum, etc.

3. Manufacturing and Repair:

(a) Manufacture of Food Products: Slaughtering, preparation and preservation of meat; dairy products; canning and preservation of fruits and vegetables, fish; grain mill products; products; sugar; boora; common salt; edible oils including vanaspati; processing of tea or coffee; manufacture of ice; animal feeds, starch, etc.

(b) Manufacture of Beverages, Tobacco and Tobacco Products: Rectifying and blending of spirits; wine industries; country liquor and toddy; carbonated water industries; bidi; cigar, cigarettes, zerda, snuff, etc.

(c) Manufacture of Cotton Textiles: Cotton ginning, cleaning and baling; spinning, weaving and finishing of cotton in textiles mills; printing; dyeing and bleaching of cotton textiles; cotton spinning other than in mills, (charkha); khadi

production; weaving, etc. in handlooms and powerlooms, etc.

(d) Manufacture of Wool, Silk and Synthetic Fibre Textiles:

Wool cleaning, baling and pressing; weaving and finishing in mills and other than in mills; dyeing and bleaching; printing of silk, synthetic textiles; etc.

(e) Manufacture of Jute, Hemp and Mesta Textiles:

Spinning and pressing and baling of Jute and Mesta; dyeing; printing and bleaching of jute textiles and manufacture of jute bags are also covered in this.

(f) Manufacture of Textile Products:

Knitting mills; manufacture of all types of threads, cordage, ropes, etc., embroidery; carpets; rain coats; hats; made up textile goods (except garments), oil cloth, tarpaulin; coir and coir products; linolium, padding, wedding, etc., are also covered in this.

(g) Manufacture of Wood and Wood Products Furniture and Fixtures:

Manufacture of veneer, plywood and their products; sawing and planning of wood; wooden and cane boxes, crates, drums, barrels, etc., beams, posts, doors and windows; wooden industrial goods like blacks, handles, etc., cork products; wooden, bamboo and cane furniture and fixture, etc.

(h) Paper and Paper Products and Printing, Publishing and allied Industries:

Manufacture of pulp; paper, paper boards and news-prints; container and paper boxes; printing and publishing of newspapers; periodicals, books, etc., engraving, block making, book binding, etc.

(i) Leather and Fur Products: Tanning, currying, etc., of leather; footwear (excluding repair); coats, gloves, currying, dyeing, etc., of fur, fur and skin rungs, etc.

(j) Rubber, Plastic, Petroleum and Coal Products: Tyre and tube industries, foot wear made of vulcanized or moulded rubber and plastic products; petroleum refineries, production of coaltar in coke ovens, etc.

(k) Chemicals and Chemical Products: Manufacture of gases such as acids, alkalis, Oxygen, etc.; fertilisers and pesticides; paints, varnishes; drugs and medicines; perfumes, cosmetics, lotion, synthetic resins, etc., explosive and ammunition and fireworks, etc.

(l) Non-metallic Mineral Products: Structural clay products; glass and glass products; earthen ware and earthen pottery; China ware and porcelain ware; cement, lime and plaster; asbestos, etc.

(m) Basic Metal and Alloys Industries: Iron and Steel Industries; casting foundries; ferro-alloys; copper, brass, zinc and brass manufacturing, etc.

(n) Metal Products and Parts except Machinery and Transport Equipment: Metal cans from tin-plate, sheets metal, barrels, drums, pails, safe, etc.; structural metal products; metal furniture and fixture; hand tools; utensils, cutlery, etc.

(o) Machinery, Machine tools and parts except Electrical Machinery: Agricultural machinery; cranes; road rollers, boilers, diesel engine; refrigerators, air conditioners, etc.

(p) Electrical machinery, Apparatus, Appliances and Supplies and parts: Electrical motors, generators, transformers; insulated wires and cables; dry and wet batteries; radio, television, etc.; X-ray apparatus; electric computers, etc.

(q) Transport equipments and parts: Ship building and repairing locomotives and parts; Railway wagons; coaches, etc.; rail road equipment; motor vehicles; bicycles; aircrafts; push-carts and hand carts, etc.

(r) Other Manufacturing Industries: Manufacture of medical, surgical and scientific equipments; photographic and optical goods; watches; minting of coins; musical instruments, etc.

4. Electricity, Gas and Water:

Generation and transmission of electric energy or distribution is involved, e.g., manufacture of gas in gas works and its distribution; water supply, i.e., collection, purification and distribution of water, etc.

5. Construction:

It includes the construction and maintenance such as *those of* buildings, roads, railways, telegraph, telephone, water ways and water reservoirs, hydro electric projects, industrial plants, activities allied to construction such as plumbing, heating and air conditioning installation, setting of tiles, marble,

brick, etc.,; construction of electrical installations, etc.

6. Wholesale and Retail Trade & Restaurants and Hotels:

(a) Food, Textiles, Live Animals, Beverages and Intoxicants:

The wholesale trade done in cereals, pulses; foodstuff; textile and textile products; e.g., garments, shirtings, etc.; beverages, intoxicants like wines, opium, ganja, tobacco, etc.; wholesale trade in animals, straw and fodder is also covered in this.

(b) Fuel, Light, Chemicals, Perfumery, Ceramics, Glass: Wholesale trade in medicines, chemicals; fuel, lighting products; toilets; porcelain, glass utensil, crockery, etc.

(c) All types of Machinery, Equipment, including Transport and Electrical Equipment: Agricultural and industrial machinery e.g., harvestors, threshers etc., electrical machinery; transport equipments, etc.

(d) Miscellaneous Manufacturing: Wholesale trade in furniture, rubber and rubber products; building materials; clocks, etc., eye-glasses etc., medical and surgical instruments; precious metals, stones and jewellery, etc.

(e) Retail Trade in Food and Food Articles, Beverage, Tobacco and Intoxicants: Retail trade carried in grocery, vegetables, fruit selling, meat, poultry, bakery products, dairy products, pan, bidi, aerated water, etc. comes under this category.

(f) Retail Trade in Textiles: Dealers in textiles (non-ready made), ready-made garments, are some examples.

(g) Retail Trade in Others: Retail trade in such as ^{done by} medical shops, booksellers, building material ^{dealers}, etc.

(h) Restaurant and Hotels: Restaurants, cafes and other eating places, hotels, rooming houses, camps and other lodging places.

7. Transport, Storage and Communications:

Transport such as railways, tramways, motor buses, bullock carts, ekka, tonga, etc.; ocean and coastal water ^{transport} inland water transport, air transport, services rendered to transport such as packing, crating, travel agencies, etc. It also includes storage, warehousing, communication such as postal telegraph, wireless, telephone, etc.

8. Financing, Insurance, Real Estate and Business Services:

Those services belong to banking; credit institutions other than banks, e.g., loan societies, agricultural credit institutions, etc.; money lenders, financiers, etc., provident ^{fund} services; insurance carriers ^{for} life; fire, marine, accident, health, etc. It also includes business services, e.g., ^{done by} purchase and sale agents and brokers; auctioneering, accounting; data processing; engineering; advertising services, etc.; legal services rendered by advocates, barristers, pleaders, etc.

9. Community, Social and Personal Services:

Service belongs to public administration, union government, state government, police service, quasi-government bodies, sanitary services, education, scientific and research, etc. —

(a) Personal Services: ^{include} It is domestic service, ^{general} service,

services relating to laundries, cleaning and dyeing plants,
hair dressing, photographic studios, ^{those done by} international and other
extra territorial bodies, etc.

APPENDIX A2Scheme of occupational classification of population at 1971 census

besides ⁹it is even more meaningful and valid to provide details and description of activities or works constituting important occupations taken into consideration. Following is the list of classified occupations i.e. Description of works according to 1971 census.

Classified List of Occupations i.e. Description of Work*:

This classification includes ^{work done by} the Professionals, technical, administrative, executive, clerical, sale workers, besides it includes ^{work done by} farmers, fishermen, hunters, and so many other related workers. A concise description of such occupations ^{as it} follows.

1. Professional, Technical and Related Workers:

This does not include only an Engineer, Doctor, Teacher etc., but even precise particulars in respect of such workers. Such as civil, mechanical, electrical, metallurgical, mining etc. In respect of physicians, ^{has} allopathic, ayurvedic, homeopathic, ^{system} etc., ^{and} physiologists and dentists etc., ^{were separately} has been recorded. As regards teachers, university teachers, secondary school, middle school, primary school or kindergarten teachers. There are various other types of chemists, physicists, archaeologists, nurses, pharmacists, health technicians, jurists, social scientists such as economists, statisticians, geographers, historians, anthropologists, etc., as also artists, writers, painters,

* Based on Census of India 1971, series 21, Uttar Pradesh, Part II-A, General Population Tables, Ed.1973. Appendix V, p. XXV.

sculptors, actors, etc., draughtsmen, laboratory assistants, librarians, ordained religious workers, astrologers etc., with particulars of their work were recorded.

2. Administrative, Executive and Managerial Workers:

Among such workers, persons employed in Govt., quasi-govt. and other such as ⁱⁿ business firm, manufacturing establishment; or a catering establishment or a transport company and so on, figure eminently. For example, secretary to the Government of India, District Collector, Municipal Commissioner, Executive Officer of a Panchayat, Director of a firm, Manager of a business concern, Proprietor and Manager of a hotel, elected and legislative officials, aircrafts and ships officers, etc.

3. Clerical Workers:

It includes the workers such as cashier, accountant, stenographer, typist, computing clerk, key punch operator, office assistant, guard, brakesman traffic controller, railway ticket inspector, postman, telephone/teleprinter/wireless operator, record keeper, despatcher, etc., office workers would also include peons, daftaries etc.

4. Sale workers:

A sale worker may be engaged in wholesale or retail trade, Saleman or shop assistants, agents of insurance, brokers in share, auctioneers, commercial, travellers, hawkers and street vendors, money lenders, pawn brokers etc., has also been covered.

5. Service workers:

They consist of all types of service workers such as those engaged as domestic servants or in personal services or in police service or watch and ward etc. Hotel and restaurant keepers, house-keepers, matrons, and stewards (domestic and institutional), cooks, waiters, bartenders and related workers (domestic and institutional) maids and related house-keeping service workers, building caretakers, sweepers, cleaners, and related workers launderers, dry cleaners and pressers, hair dressers, beauticians and related workers, protection service workers, such as watchmen, chowkidars, gatekeepers, etc., ^{and} other service workers.

6. Farmers, Fishermen, Hunters, Loggers etc. and Related Workers:

Deep sea fishermen, inland or river water fishermen, shell gatherers, forest rangers, charcoal burners, forest produce gatherers, plantation managers, farm machine operators, gardeners, toddy tappers, rubber tappers, hunters, bird trappers etc.

7. Production and other Related Workers, Transport Equipment Operators and Labourers:

This category includes a vary large variety of craftsmen and operators such as miners, quarrymen, well drillers, cotton ginner, spinners, dyers, knitters, lace makers, carpet makers, etc., tailors, cutters, hat makers, embroiderers, shoe makers or repairers, saddle makers, leather cutters etc., blacksmiths,

furnacemen, moulders, etc., cart builders, wheel wrights, cabinet makers, etc., stone cutters, brick-layers, masons, hut builders, thatchers, well diggers, etc., jewellers, goldsmiths, watch and clock makers or repairers, welders and plate cutters, sheet metal workers, machine tool operators, electricians, electrical and electronic wire fitters, radio mechanic, electric linesmen, cable jointers, carpenters, joiners, sawers, etc., printing type of machine operators, proof readers, photo-litho operators, book binders, potters, moulders, firemen, kilnsmen, blowers and makers of glass, millers, bakers, confectioners, sweetmeat makers, food canners, coffee or tea planters, tobacco curers, graders and blenders of tobacco, bidi or cigar makers, snuff or zarda makers, tyre builders, crane or hoist operators, loaders and unloaders, etc.

APPENDIX A3Scheme of occupational classification of population at 1971 census

However there are certain industrial activities carried on household basis in the house home mainly by family members and managed by head of the family; of course sometimes in addition to their regular activity of cultivation and ^{they} contribute substantially to their family income and hence form the main activity. Therefore it becomes essential to enumerate a few of such activities which are conducted on household basis and categorised as household industry. Following is the list of a few such typical industries conducted on a household industry basis according to 1971 census*.

Classified List of Household Industries:1. Foodstuffs:

Production of flour by village chakkis or flour mills, milling or dehusking of paddy, grinding of chillies, turmeric, etc., production of gur, khandsari, boora, etc., production of pickles, chutney, jams, etc., processing of cashew nuts, making of dried vegetables, manufacture of sweetmeats and bakery products, production of butter, ghee, etc., slaughtering and preservation of meat and fish, fish curing, etc., oil pressing ghani etc.

* Census of India 1971, Series 21, Uttar Pradesh, Part II-A, General Population Tables, Ed. 1973, p. XII.

2. Beverages:

Manufacture of country liquor, toddy, production of soda water, ice, ice-cream, sharbats, etc., processing of coffee etc.

3. Tobacco Products:

Manufacture of bidi, cigars, cheroots, tobacco, snuff, etc.

4. Textile Cotton:

Cotton ginning, carding, pressing and baling, spinning, etc., dyeing and bleaching of cloth, weaving in handlooms or powerlooms or manufacture of khadi, cloth printing, making of fishing nets, mosquito nets, cotton thread, rope, twine, etc.

5. Textile Jute, Wool or Silk:

Similar type of production or processing as mentioned under textile cotton but pertaining to Jute, Wool and Silk.

6. Textile Miscellaneous:

Making of durries, carpets, hosiery, embroidery, chrochet work, lace garland making, manufacture of headgear, making of newar, bed covers, curtains, pillow, pillow cases, etc., making of mattress, quilt (rezai), etc., making of namda felt, coconut fibre for upholstery, making of brushes, brooms etc., from coconut fibres, coir spinning, manufacture and repair of umbrellas, manufacture of dolls and toys ^{from} (rags and cotton) etc.

7. Manufacture of Wood and Wood Products:

Sawing and planing of wood, manufacture of wooden

furniture, structural goods like beams, door and window frames, etc., wooden agricultural implements and their repair, wooden lacquerware, wooden toys, wood carving, sawdust and plaster figure making, inlay work, match splinters, plywood and veneers, etc., making palm leaf mats, fans, umbrellas, etc., baskets and broomsticks, caning of chairs, making of chiks and khas khas tatties making of cart wheels, wooden sandals, etc.

8. Paper and Paper Products:

Manufacture of pulp and paper by hand, making of envelopes, paper ~~made~~ articles, ^{such as} card board boxes, paper flower, paper kites, toys, etc.

9. Printing and Publishing:

Printing works, lithography, block making, book binding, etc.

10. Leather and Leather Products:

Flaying and processing of hides and skins, making leather footwear, wearing apparel of leather and fur, repair of shoes or other leather products.

11. Rubber, Petroleum and Cool Products:

Vulcanising tyres and tubes, manufacture of chappals from torn tyres and other rubber footwear, manufacture of rubber products from natural and synthetic rubber.

12. Chemicals and Chemical Products:

Manufacture of toys, paints, colours, etc., manufacture of matches, fireworks, perfumes, cosmetics, manufacture of

ayurvedic medicines, soap, plastic products, celluloid goods, manufacture of ink, candles, boot polish, etc.

13. Non-metallic Mineral Products and other than Petroleum and Coal:

Making of bricks, roofing tiles, sanitary fittings, cement statues, stone or marble carvings, manufacture of stone structurals, stone dressing and stone crushing, mica splitting and manufacture of other mica products, making of earthenware and pottery, crockery, glass beads and bangles, earthen toys, manufacture of glass products, etc.

14. Basic Metals and their Products except Machinery and Transport Equipment:

Manufacture of iron arms and weapons and their service and repair, iron and steel furniture, brass, bell-metal utensils, aluminium utensils, tin utensils, copper utensils, etc., nickel-ing and electroplating, blacksmithy, manufacture and repair of agricultural implements such as ploughshare, etc., making and repairing of locks and trunks, cutlery, manufacture of scales, weights and measures and foundry etc.

15. Machinery (all kinds other than transport) and Electrical Equipment:

Manufacture of small machine tools and parts, repairing and servicing of fans, radios, domestic electrical appliances, etc.

16. Transport Equipment:

Repairing and servicing of automobiles, manufacture of cycle parts, rickshaw parts, boats and barges, manufacture of

animal-drawn and hand-drawn vehicles such as bullock carts, wheel barrow, etc.

17. Miscellaneous Manufacturing Industries:

Repair of spectacles, photographic equipment, goldsmithy, silver filigree industry, gold covering work, bidriware, musical instruments, fountain pens, making of cowdung cakes, manufacture of sports goods, repairing of petromax lights, making of buttons and beads from conchshell and horn goods.

APPENDIX B1
Table 1

Growth of population in Eastern Uttar Pradesh (1901-1971 and 1981 projected) in lakhs

Name of the District, Region, State	1901	1911	1921	1931	1941	1951	1961	1971	1981 projected in lakhs
1. Bahraich	1049710	1045775	1063222	1134082	1238098	1343660	1499929	1726972	19.80
2. Gonda	1403529	1412519	1473389	1576003	1719644	1877484	2073237	2302029	26.60
3. Faizabad	1222943	1151883	1169711	1202565	1316970	1479019	1634665	1927281	22.35
4. Sultanpur	1092273	1056550	1012050	1060055	1110433	1292949	1412984	1642928	18.70
5. Pratapgarh	908105	895279	850752	901618	1036496	1106305	1252196	1422707	15.85
6. Basti	1845104	1829381	1924134	2076843	2184399	2386246	2625755	2988090	33.25
7. Gorakhpur	1450884	1580966	1612851	1801373	1993661	2238588	2565182	3038177	35.45
8. Deoria	1487801	1620214	1653979	1766188	1969913	2102627	2375075	2812350	32.60
9. Azamgarh	1551654	1496084	1531970	1574982	1826590	2106557	2408052	2857484	34.40
10. Jaunpur	1201667	1155244	1153633	1234365	1385490	1515043	1727264	2005434	23.05
11. Ballia	989420	848371	833510	915855	1057485	1198916	1344016	1588935	18.20
12. Ghazipur	857830	788298	781333	824721	985081	1140932	1321578	1531654	18.00
13. Varanasi	1288891	1295567	1315977	1408845	1671388	1980090	2364874	2852459	33.45
14. Mirzapur	730962	723311	722700	786789	898094	1015236	1246958	1541088	18.45
15. Allahabad*	1488129	1464931	1402350	1489303	1808866	710478	824162	1013001	33.50
E.U.P.	18568902	18364373	18501561	19753587	22202608	23494630	26675927	31246589	383.60
U.P. (%)	38.21	38.14	39.64	39.68	39.27	37.16	36.17	35.97	-
U.P.	48627655	48154908	46672398	49779538	56535154	63219655	73754554	88341144	-
India (lakh)	2362.81	2521.22	2513.52	2790.15	3187.01	3611.30	4392.35	5479.50	-

* Population figures for Allahabad upto 1951 Census year stand for the entire district but after this year they account for only three tahsils i.e. Sonwan, Phulpur and Handia.

Distribution of working population (workers) by persons males and females for the districts of Eastern Uttar Pradesh (1951-1971)

Name of the District, Region, State	Livelihood classes					
	1951 (I to VIII)		1961 (I to IX)		1971 (I to IX)	
	T	M	T	M	T	M
1. Bahraich	621920	446399	175521	515729	150575	576711
2. Gonda	943282	603544	339738	676990	259132	729600
3. Faizabad	710401	446035	264366	482212	203316	529471
4. Sultanpur	614645	380630	234015	409414	176858	438191
5. Pratapgarh	538769	313322	225447	572614	232622	346611
6. Basti	1223340	749763	473577	1308699	469449	902786
7. Gorakhpur	1109258	661445	447813	752523	290073	831004
8. Deoria	1047540	613700	433840	966893	676820	743307
9. Azamgarh	925158	576156	349002	940130	642036	682190
10. Jaunpur	704917	419938	284979	697910	247659	462833
11. Ballia	451903	303232	148671	486136	139284	374069
12. Ghazipur	502560	315539	187021	524275	453041	371244
13. Varanasi	857742	573350	284392	873927	173328	719738
14. Mirzapur	491776	303454	188322	578421	222247	428000
15. Allahabad	393617	230517	163100	389777	185375	257793
E.U.P.	11136828	6937024	4199804	11356016	3502436	8391548
U.P.	26396614	19279496	7177118	28850141	6369781	24562058

Source: Census of India, U.P. 1951.
Census of India, U.P. 1961.
Census of India, U.P. 1971, series 21.

APPENDIX B2

Total population, workers and non-workers classified by age-groups, males and females
in Eastern Uttar Pradesh, 1971

W = Worker; NW = Non-worker

T = Total; M = Male; F = Female

Name of the District, Region, State	Population - Total, workers and non-workers classified by age-groups, males and females												
	All persons												
	T	0-14 yrs		15-19 yrs		20-24 yrs		F	M	F	M	F	M
		M	F	M	F	M	F						
1	2	3	4	5	6	7	8	9	10				
1. Bahraich	W	606022	576711	29311	38200	2358	56276	1872	59587	2606			
	NW	1120950	361192	759758	250060	285261	26017	48996	15915	60941			
2. Gonda	W	805691	729600	76091	41991	5195	72351	6109	75706	7190			
	NW	1496338	497848	998490	441419	389128	27825	71678	7964	80023			
3. Faizabad	W	613613	529471	84142	20904	6406	47642	8793	52208	8568			
	NW	1313673	470975	842698	398536	354727	37179	65585	9958	63132			
4. Sultanpur	W	513758	436191	77567	14064	3641	39515	7037	42022	7908			
	NW	1129170	397854	731316	342749	308247	32544	55648	6780	53310			
5. Azamgarh	W	818824	682190	136634	34435	14569	55142	17136	64640	17016			
	NW	2038668	749077	1289582	555711	600394	70254	89523	15293	89461			
6. Pratapgarh	W	432090	346611	85479	13806	6229	30188	7580	31239	7168			
	NW	990617	359115	631502	307651	279231	29808	49662	7132	46853			
7. Basti	W	1050335	902786	147549	46506	13973	78818	14108	94340	15832			
	NW	1933755	665251	1268504	582138	530140	44642	87566	12239	97559			
8. Gorakhpur	W	983934	831004	152930	38716	15549	68985	14877	86276	16225			
	NW	2054243	749586	1304657	622256	572460	64006	93756	21900	100317			
9. Deoria	W	848661	743307	105354	38347	11501	60282	9197	71520	8994			
	NW	1963689	692816	1270873	584526	554982	57607	87382	18377	90669			

**Population - Total, workers and non-workers classified by age-groups,
males and females**

Name of the District, Region	25-29 yrs		30-39 yrs		40-49 yrs		50-59 yrs		60+ and above	
	M	F	M	F	M	F	M	F	M	F
1	11	12	13	14	15	16	17	18	19	20
1. Bahraich W	70957	3121	130884	6002	104769	5340	62663	4193	53375	3819
NW	16321	65689	16544	113931	12045	79483	11144	47671	13146	57786
2. Gonda W	89575	8535	165458	17509	129395	15175	83264	9135	71860	7183
NW	3338	79443	3576	140693	2557	101224	2243	62944	8866	73357
3. Faizabad W	65450	9565	120329	19342	94264	14891	66416	8972	62258	7605
NW	3526	62268	3882	107109	2965	76445	3046	50232	11883	63194
4. Sultanpur W	49956	8406	98670	19068	80497	14755	56422	8994	55045	7758
NW	2888	52872	1754	93831	1864	68304	1775	43707	7500	55,397
5. Azamgarh W	81437	16539	139752	28691	125931	21827	88562	12800	92291	8056
NW	13235	99558	6159	135379	3756	106041	12741	77986	71938	91241
6. Pratapgarh W	38651	8504	74396	19581	63483	17046	48222	10938	46626	8433
NW	2494	43524	2032	69388	1397	57289	1394	39291	7207	46169
7. Basti W	110648	17025	205282	33768	160579	26255	110126	15559	96487	11029
NW	3752	93561	3621	166204	2516	118942	2640	78668	13703	95864
8. Gorakhpur W	102814	17174	193172	35184	154787	27135	101579	15703	84675	11083
NW	7618	94028	6939	167887	4587	114639	4331	72380	17949	89196
9. Deoria W	90293	10934	169606	23643	137166	19974	94788	11950	81305	9171
NW	6610	96840	5677	164504	3713	117867	2907	72861	13399	85768

Contd.

1	2	3	4	5	6	7	8	9	10
10. Jaunpur	W 538442 NW 1466992	462833 534177	75609 932815	17229 444381	5473 411596	37124 47275	6681 79009	45504 14714	7852 75837
11. Ballia	W 443041 NW 1145894	374069 430352	68972 715542	19172 317059	5966 308993	27979 43964	6851 58774	43306 18633	8147 55536
12. Ghazipur	W 453292 NW 1078362	371244 403372	82048 674990	15548 335396	6360 296703	26340 34980	7297 32621	34150 9634	7554 57309
13. Varanasi	W 827486 NW 2024973	719738 774500	107748 1250473	33578 597400	8277 549013	57950 72394	9847 101332	77575 33070	13033 105131
14. Mirzapur	W 539488 NW 1001600	428000 381685	111488 619915	26146 322259	13453 298852	36065 26076	8932 29941	45918 8682	12074 52331
15. Allahabad	W 320928 NW 692073	257793 263668	63135 428405	12125 206890	5413 209780	20110 18120	5807 29843	29111 10897	6830 28570
E.U.P.	W 9795605 NW 21450984	8391548 7731468	1404057 12719516	410767 6308431	124363 5949607	714767 632751	132224 1006227	853102 211188	151164 1052812

1		11	12	13	14	15	16	17	18	19	20
10. Jaunpur	W NW	57051 6623	8672 72560	101213 5243	18122 108106	85252 3969	13145 77061	63060 2768	9142 51074	56400 9204	6522 57572
11. Ballia	W NW	40951 11264	9431 54272	79470 9986	14386 85834	62889 9892	10011 60337	52610 6695	8913 42226	47692 12859	5267 49520
12. Ghazipur	W NW	48523 4301	15070 56976	82042 4750	19735 61572	59496 2216	12250 55428	48775 2392	6886 43284	56370 9203	6896 51097
13. Varanasi	W NW	94622 14480	14403 97848	163633 14604	24305 151275	124682 11582	17713 102733	89197 9640	11541 65965	78501 21330	8629 77176
14. Mirzapur	W NW	56965 4448	13647 41506	105403 4123	25694 69689	69898 3978	19989 45187	43951 3104	10723 34932	43654 9015	6976 37577
15. Allahabad	W NW	35145 5168	7787 28333	63711 5514	14963 48140	40898 2204	10845 30476	27954 1393	6847 19583	28739 12382	4543 33680
E.U.D.	W NW	1033038 6066	168813 1039278	1893021 95504	319993 1683586	1492986 60741	246361 121448	1037589 68713	152286 702764	955278 239584	112970 964594

APPENDIX B3

Distribution of workers divided into males, and females in each category of primary sector
in Eastern Uttar Pradesh, 1971

Name of the District, Tahsil, Rural & Urban	I. Cultivation				II. Agricultural labourers				III. Livestock, plantation etc.				IV. Mining and quarrying			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	2	3	4	5	6	7	8	9								
1. <u>Bahraich</u>	R U	447202 3889	14083 124	71455 1869	12087 99	2477 209	239 22	13 5	1 -							
a. Nanpara	R U	141668 484	3617 17	26232 671	3671 55	1499 39	120 -	5 1	- -							
b. Kaiserganj	T	147070	4220	18556	2663	163	11	4	-							
c. Bahraich	R U	158464 3405	6646 107	26667 1198	5753 44	815 170	108 22	4 4	1 -							
2. <u>Gonda</u>	R U	535020 2712	33180 151	112461 2169	37224 241	2904 281	104 25	6 119	- 2							
a. Balarampur	R U	125366 846	12219 42	44027 758	16051 127	1465 142	57 11	3 85	- 2							
b. Utraula	R U	138504 251	10356 11	25902 98	10338 13	614 4	19 -	2 30	- -							
c. Gonda	R U	140524 710	6083 49	21577 680	4751 59	513 90	23 5	- 4	- -							
d. Tarabganj	R U	130626 905	4522 49	20955 633	6084 42	312 45	5 9	1 -	- -							
3. <u>Faizabad</u>	R U	319507 3623	24202 191	108711 2742	51194 595	2049 338	258 9	20 54	- 1							
a. Faizabad	R U	62665 2115	5697 110	23862 1888	10657 290	440 291	22 9	3 37	- 1							

Contd.

1	2	3	4	5	6	7	8	9
b. Bilapur	T	90709	11093	21539	11963	442	34	3
c. Akbarpur	R U	97617 911	4343 58	38731 438	17130 114	753 19	134 -	12 1
d. Tanda	R U	68516 597	3069 23	24579 416	11444 191	414 28	68 -	2 16
4. <u>Sultanpur</u>	R U	267589 203	22321 18	112709 286	49601 22	850 48	153 -	15 7
a. Musafirkhana	T	69895	6643	24352	13354	158	19	1
b. Amethi	T	48366	7502	21264	13885	211	75	1
c. Sultanpur	R U	78773 203	4576 18	38414 246	12253 22	247 48	30 -	2 7
d. Kadipur	T	70555	3400	28679	10109	234	29	11
5. <u>Pratapgarh</u>	R U	229678 287	32299 18	67966 182	43926 107	262 60	54 3	59 4
a. Kunda	T	87056	14741	25152	15547	104	19	19
b. Pratapgarh	R U	72082 287	13462 18	22056 182	16226 107	52 60	6 3	21 4
c. Patti	T	70540	8096	20758	12153	106	29	19
6. <u>Basti</u>	R U	629329 2523	48378 93	179285 2607	90651 566	1636 109	173 1	92 5
a. Domariaganj	T	113885	10906	28373	11816	199	26	6
b. Naugarh	T	94676	8971	29294	15154	231	71	44

Contd.

1	2	3	4	5	6	7	8	9
c. Bansi	R U	96900 1013	8470 45	22761 534	12640 121	105 13	21 -	7 -
d. Basti	R U	109953 980	4060 34	33629 1545	17964 306	342 87	10 1	- 1
e. Khalilabad	R U	109877 530	7569 14	44173 528	21008 139	600 9	42 -	18 3
f. Harraiya	T	104038	8402	21055	12069	159	3	9
7. Gorakhpur	R U	429851 1053	28043 34	255262 1618	115390 188	3065 263	460 2	194 17
a. Pharenda	T	101740	6998	37075	17100	395	9	21
b. Gorakhpur	T R U	122046 121084 962	7681 7651 30	94255 92832 1423	38457 38298 159	1375 1113 262	157 155 2	102 85 17
c. Maharajganj	T	121534	6713	61896	23256	924	17	17
d. Banisgoan	R U	85493 91	6681 4	63459 195	36716 29	633 1	279 -	71 -
8. Deoria	R U	465740 1605	22234 48	188504 2375	76702 339	1460 139	119 3	178 45
a. Hata	T	123675	5467	49836	15296	470	26	59
b. Padrauna	R U	121494 628	6393 18	57589 799	20044 127	419 42	65 3	48 10
c. Deoria	R U	116534 456	4796 16	44099 890	21842 124	265 92	20 3	42 35
d. Salempur	R U	104037 521	5578 14	36980 686	19520 88	306 5	8 -	29 -

Contd.

1	2	3	4	5	6	7	8	9	
9. <u>Azamgarh</u>	R U	411992 1530	31982 133	146813 1339	80223 454	2889 56	718 10	259 116	27 2
a. Sagar	T	67439	3925	20690	10540	625	302	119	9
b. Ghosi	R U	70290 97	6757 9	28330 160	19042 58	716 2	70 1	63 -	7 -
c. Azamgarh	R U	64722 493	3878 13	21279 247	9633 32	515 5	171 -	15 76	11 -
d. Muhammadabad	R U	62,067 940	4276 111	23940 932	15816 364	494 49	110 9	35 40	- 2
e. Phulpur	T	87134	7284	28772	13331	225	28	8	-
f. Lalganj	T	60340	5862	23802	11861	314	17	19	-
10. <u>Jaunpur</u>	R U	290981 3830	26833 200	85471 1486	40806 353	1222 334	125 12	143 25	16 -
a. Shahganj	R U	69183 257	4128 21	21900 29	7610 1	285 22	20 1	67 -	2 -
b. Machhali- shahar	R U	54487 667	6784 33	18674 310	11651 99	153 5	18 2	10 -	- -
c. Jaunpur	R U	64335 2367	4634 116	14495 948	6334 210	274 302	50 8	19 25	14 -
d. Mariahu	R U	52946 312	6619 26	16282 161	9227 41	332 4	30 -	14 -	- -
e. Kerakat	R U	50342 227	4668 4	14120 38	5984 2	178 1	7 1	33 -	- -

Contd.

1	2	3	4	5	6	7	8	9
11. <u>Ballia</u>	R U	182901 1669	8464 64	116921 2339	51827 822	2330 127	248 2	190 8
a. Rasra	R U	66465 225	3447 5	33130 219	17415 97	676 33	66 2	86 -
b. Bansdih	R U	58663 798	2757 50	33845 1252	16571 583	508 9	50 -	38 -
c. Ballia	R U	57773 646	2260 9	49946 868	17841 142	1146 85	132 -	66 8
12. <u>Ghazipur</u>	R U	207396 1755	24312 81	91171 863	46101 228	1818 328	472 14	152 -
a. Saidpur	R U	78614 495	10351 10	21102 193	10664 45	531 181	103 7	52 -
b. Ghazipur	R U	44367 713	4854 24	16492 299	7955 72	387 120	34 7	37 -
c. Muhammadabad	R U	49951 547	6403 47	28279 371	15127 111	428 27	126 -	44 -
d. Zamania	T	34464	2704	25298	12355	472	209	19
13. <u>Varanasi</u>	R U	251341 4632	19002 277	139625 3752	63936 687	4204 1249	832 83	315 75
a. Gyanpur	R U	57970 644	4415 56	31535 654	15838 156	642 118	188 17	70 -
b. Varanasi	R U	102242 3566	9491 199	44443 2624	18805 496	1560 1062	470 63	140 72
c. Chandauli	R U	69780 173	3646 3	45331 198	19830 6	1569 62	170 2	98 3

Contd.

	1	2	3	4	5	6	7	8	9
d. Chakla	R U	21349 249	1450 19	18316 276	9463 29	433 7	4 1	7 -	- -
14. <u>Mirzapur</u>	R U	188741 3021	17732 163	131675 3001	84805 1034	2338 386	296 16	762 43	202 3
a. Mirzapur	R U	61905 1437	5000 113	46265 1802	27274 548	396 194	16 12	132 23	1 1
b. Chunar	R U	47579 979	3618 25	36815 549	18679 226	566 59	35 3	285 13	74 1
c. Robertsganj	R U	50267 189	6347 9	39664 298	30196 166	746 -	78 -	215 1	123 -
d. Dudhi	R U	28990 416	2767 16	14931 352	8656 94	630 60	167 1	130 6	4 1
15. <u>Allahabad</u>	R U	150633 459	21310 35	57836 350	35001 176	413 19	64 1	97 -	14 -
a. Soraoan	R U	51961 141	8059 11	20183 146	12614 62	76 3	5 1	10 -	2 -
b. Phulpur	R U	47088 318	5048 24	20009 204	10138 114	144 16	35 -	19 -	1 -
c. Handia	T	51589	8203	17644	11249	193	24	68	11
E.U.P.	R U	5007887 32815	378794 1606	1865905 26978	879434 5911	30106 3457	4193 325	2590 528	330 16

APPENDIX B3 (Contd.)

Distribution of workers divided into males and females in each category of Secondary Sector in Eastern Uttar Pradesh, 1971

Name of the District, Tahsil, Rural & Urban	V. Manufacturing, Processing, Servicing and Repairs					VI. Construction		
	Va. Household		Vb. Other than House- hold Industry					
	M	F	M	F	M	M	F	F
1	2	3	4	5	6	7	8	9
1. <u>Bahraich</u>	R U	4201 1240	298 98	2132 4111	41 37	659 956	38 6	
a. Nanpara	R U	1638 299	169 26	789 532	16 2	364 179	35 -	
b. Kaiserganj	T	833	29	624	14	78	-	
c. Bahraich	R U	1730 941	100 72	719 3579	11 35	217 777	3 6	
2. <u>Gonda</u>	R U	11315 1610	1497 145	4144 5067	388 106	1404 903	3 6	
a. Balrampur	R U	3661 773	399 34	1293 1875	121 34	456 474	1 2	
b. Utraula	R U	3763 162	305 16	796 544	51 11	357 139	2 2	
c. Gonda	R U	2406 614	608 83	925 1785	144 24	459 196	- 2	
d. Tarabganj	R U	1485 61	185 12	1130 863	72 37	132 94	- -	
3. <u>Faizabad</u>	R U	16007 8258	2375 1132	4527 7295	333 277	1079 648	3 6	

Contd.

1	2	3	4	5	6	7	
a. Faizabad	R U	2992 1275	373 53	1521 4244	243 104	336 460	1 1
b. Bikapur	T	2076	360	527	13	162	1
c. Akbarpur	R U	5300 1906	1093 62	1035 1130	39 41	361 99	- 1
d. Tanda	R U	5639 5077	549 1017	1444 1921	38 132	220 89	1 4
4. <u>Sultanpur</u>	R U	14285 452	2265 22	1850 752	142 12	573 198	77 -
a. Musafirkhana	T	3092	364	265	32	55	47
b. Amethi	T	2983	580	486	21	45	-
c. Sultanpur	R U	5532 452	1023 22	581 752	62 12	260 198	9 -
d. Kadipur	T	2678	298	518	27	213	21
5. <u>Pratapgarh</u>	R U	11759 326	2419 36	3016 856	166 21	391 159	6 1
a. Kunda	T	4454	1058	989	65	138	6
b. Pratapgarh	R U	4069 326	732 36	1090 856	56 21	156 159	- -
c. Patti	T	3236	629	937	45	97	-
6. <u>Basti</u>	R U	21128 1256	4044 61	9378 1924	715 35	742 327	39 4

Contd.

1	2	3	4	5	6	7	
a. Dommariganj	R	2938	280	1291	94	131	28
b. Naugarh	T	2403	277	1396	96	168	1
c. Bansi	R	3314	941	437	50	54	-
	U	320	17	160	1	42	-
d. Basti	R	2996	362	2797	250	201	1
	U	522	30	1164	29	241	4
e. Khalilabad	R	7753	2007	2459	154	136	2
	U	414	14	600	5	44	-
f. Harraiya	T	1724	177	998	71	52	7
7. Gorakhpur	R	13958	2253	18202	873	2079	55
	U	4019	446	7078	142	825	5
a. Pharenda	T	1999	250	2198	156	181	5
b. Mahrajganj	T	2297	275	2609	221	674	46
c. Gorakhpur	R	5596	845	10803	299	1006	3
	U	3591	425	6864	141	791	5
d. Bansgoan	R	4066	883	2592	197	218	1
	U	428	21	214	1	34	-
8. Deoria	R	10996	2228	9751	368	2001	161
	U	1703	53	3002	44	582	1
a. Hata	T	3393	595	2739	155	355	34
b. Padrauna	R	2652	386	2601	88	736	71
	U	402	27	1623	10	286	1
c. Deoria	R	2469	505	2505	62	569	45
	U	768	13	926	12	221	-

Contd.

1	2	3	4	5	6	7	
d. Salempur	R U	2482 531	742 13	1906 453	63 22	341 75	11 -
9. <u>Azamgarh</u>	R U	24374 15777	7376 9445	9980 3446	897 256	969 590	62 10
a. Sagari	T	2215	258	981	64	149	15
b. Ghosi	R U	5167 2290	3356 1149	1772 132	381 6	180 25	7 1
c. Azamgarh	R U	2496 1005	338 109	1408 923	74 26	217 298	15 4
d. Mohemmadabad	R U	9032 12482	1884 8187	3693 2391	202 224	230 267	14 9
e. Phulpur	T	2949	743	998	78	109	1
f. Lalganj	T	2515	797	1128	98	84	10
10. <u>Jaunpur</u>	R U	13576 3542	2686 312	7023 3636	684 141	801 749	17 2
a. Shahganj	R U	2304 353	272 32	1780 212	78 2	176 68	- 1
b. Machhalishahar	R U	1781 615	297 47	1087 523	198 14	110 81	- -
c. Jaunpur	R U	2509 1993	613 168	1535 2680	150 117	258 573	10 1
d. Marfina	R U	4886 280	1016 49	1645 170	145 8	120 18	- -
e. Kerakat	R U	2096 301	488 16	976 51	113 -	137 9	7 -

Contd.

1	2	3	4	5	6	7
11. <u>Ballia</u>	R U	14116 1263	3631 106	5048 1325	722 39	986 300
a. Rasra	R U	4267 388	1081 65	1489 339	278 27	250 53
b. Bansdih	R U	3657 178	911 14	1122 7	146 -	290 2
c. Ballia	R U	6192 697	1639 27	2437 979	298 12	446 245
12. <u>Ghazipur</u>	R U	15371 1330	3621 118	4562 1717	1354 51	737 340
a. Saidpur	R U	4350 236	1034 24	1416 268	743 10	126 22
b. Ghazipur	R U	3041 665	684 69	1084 1226	173 36	126 296
c. Mohammadabad	R U	4569 429	931 25	915 223	254 5	262 22
d. Zamania	T	3411	972	1147	184	223
13. <u>Varanasi</u>	R U	50166 40035	7282 3569	20616 28904	845 808	3659 2985
a. Gyanpur	R U	14696 705	1811 191	6456 2129	224 192	429 85
b. Varanasi	R U	27424 38953	4240 3347	9373 25506	478 590	2266 2709
c. Chandauli	R U	6641 249	1084 15	4399 1130	130 14	378 189

Contd.

1	2	3	4	5	6	7	
d. Chakia	R U	1405 128	147 16	388 139	13 12	86 2	1 -
14. <u>Mirzapur</u>	R U	14205 2984	2100 288	7091 13385	312 193	967 1423	9 6
a. Mirzapur	R U	7404 1846	970 149	3486 6457	95 161	594 638	2 3
b. Chunar	R U	4748 572	641 95	1196 661	141 28	226 75	4 2
c. Robertsganj	R U	1216 375	285 11	1715 2136	30 4	97 510	2 1
d. Dudhi	R U	837 191	204 33	694 4131	46 5	50 200	1 -
15. <u>Allahabad</u>	R U	14990 833	4052 68	5432 650	707 46	749 31	8 1
a. Soraon	R U	3414 613	490 51	1483 309	110 5	269 27	3 1
b. Phulpur	R U	4147 220	1077 17	2008 341	261 41	265 4	4 -
c. Handia	R	7429	2485	1941	336	215	1
E.U.P.	R U	247447 84626	49127 15899	112732 83148	8567 2213	17796 11016	804 80

APPENDIX B3 (Contd.)

Distribution of workers divided into males and females in each category of Tertiary sector
in Eastern Uttar Pradesh, 1971

Name of the District, Tahsil, Rural & Urban		VII. Trade and commerce		VIII. Transport, & communication		IX. Other services	
		M	F	M	F	M	F
1		2	3	4	5	6	7
1. <u>Bahraich</u>	R U	5504 6830	104 104	505 1238	2 4	14743 7473	709 815
a. Nanpara	R U	2365 1223	33 18	238 154	- -	5498 1255	177 129
b. Kaiserganj	T	1038	18	98	1	3869	215
c. Bahraich	R U	2101 5607	53 86	169 1084	1 4	5376 6218	317 686
2. <u>Gonda</u>	R U	9123 8182	351 214	2679 3196	11 54	16062 10243	1222 1167
a. Balrampur	R U	2925 2815	86 75	534 699	1 1	4868 3907	406 434
b. Utraula	R U	2954 853	156 23	640 94	4 1	4797 1046	316 58
c. Gonda	R U	1970 2946	67 83	1153 2299	4 52	3710 4343	229 572
d. Tarabganj	R U	1274 1568	42 33	352 104	2 -	2687 947	271 103
3. <u>Faizabad</u>	R U	8198 9230	382 339	2810 2589	46 19	17543 14243	1325 1455

Contd.

1	2	3	4	5	6	7	
a. Faizabad	R U	2432 6236	98 244	1150 2353	3 15	5166 11850	300 1146
b. Bikapur	T	1723	102	404	18	3285	317
c. Akbarpur	R U	2329 1284	140 30	872 140	24 -	5132 886	472 64
d. Tanda	R U	1714 1710	42 65	384 96	1 4	3960 1507	236 245
4. <u>Sultanpur</u>	R U	8699 3186	496 79	1483 673	31 3	19577 2756	1951 372
a. Musafirkhana	T	1831	76	181	11	4266	619
b. Amethi	T	1842	136	311	3	3810	385
c. Sultanpur	R U	2703 3186	219 79	581 673	16 3	6563 2756	512 372
d. Kadipur	T	2323	65	410	1	4938	435
5. Pratapgarh	R U	7197 2757	411 87	1376 525	9 1	17586 2165	1552 362
a. Kunda	T	2625	139	325	3	5372	545
b. pratapgarh	R U	2318 2757	141 87	532 525	2 1	6907 2165	544 362
c. Patti	T	2254	131	519	4	5307	463
6. <u>Basti</u>	R U	14961 5010	726 150	2451 831	16 1	23097 6095	1313 572
a. Domariaganj	T	2747	131	293	4	3761	174

Contd.

1	2	3	4	5	6	7	
b. Naugarh	T	3040	127	377	6	4017	222
c. Bansi	R U	924 642	37 25	166 43	- -	2718 566	133 50
d. Basti	R U	2051 3343	128 98	627 677	1 1	4505 4725	252 486
e. Harraiya	T	2486	145	254	3	3392	180
f. Khalilabad	R U	3103 1025	158 27	734 111	2 -	4704 804	352 36
7. <u>Gorakhpur</u>	R U	15046 11493	518 338	6772 16053	32 156	26875 17281	1934 2024
a. Pharenda	T	3603	88	1068	3	4531	230
b. Mahrajganj	T	2309	89	460	6	4594	263
c. Gorakhpur	R U	5191 10894	169 316	4219 16014	20 156	11213 16877	701 2003
d. Balgoan	R U	3443 599	174 22	1025 39	3 -	6537 404	740 21
8. <u>Deoria</u>	R U	10202 5494	277 102	2641 959	11 7	30694 5238	2042 612
a. Hata	T	2401	51	565	3	7603	474
b. Padrauna	R U	2022 2085	55 45	460 332	1 4	6835 1290	450 98
c. Deoria	R U	2462 2416	89 33	597 473	2 3	7237 3277	531 371

1	2	3	4	5	6	7	
d. Salempur	R U	3317 993	82 24	1018 154	5 -	8919 671	587 143
9. <u>Azamgarh</u>	R U	13762 6366	786 259	2454 855	21 1	31295 7328	3198 774
a. sagari	T	1770	81	226	-	4089	392
b. Ghosi	R U	2900 634	207 53	465 28	4 -	6812 185	986 37
c. Azamgarh	R U	2213 2196	101 65	593 388	10 1	6078 4132	380 363
d. Mohemmadabad	R U	2140 3536	129 141	529 439	1 -	5476 3011	554 374
e. Phulpur	T	2443	143	413	6	5120	501
f. Lalganj	T	2296	125	228	-	3720	385
10. <u>Jaunpur</u>	R U	10094 9669	682 197	2625 1473	31 5	19716 6437	1665 842
a. Shahganj	R U	2410 1433	130 34	515 167	1 -	4116 679	317 83
b. Machhalishahar	R U	1376 1636	63 42	299 134	- -	3587 539	224 59
c. Jaunpur	R U	2403 5436	109 90	786 1093	10 4	4642 4620	356 671
d. Mariahu	R U	2351 604	265 24	426 58	15 1	3916 341	383 22
e. Kerakat	R U	1554 560	115 7	599 21	5 -	3455 258	385 7

Contd.

1	2	3	4	5	6	7	
11. Ballia	R U	9887 4371	522 138	2419 475	16 7	22019 5375	1856 494
a. Rasra	R U	3117 978	119 21	610 41	3 4	6746 705	590 67
b. Bansdih	R U	2612 312	184 20	362 19	2 -	5440 252	588 28
c. Ballia	R U	4158 3081	219 97	1447 415	11 3	9833 4418	678 399
12. Ghazipur	R U	8709 4426	846 95	1579 621	83 1	23448 4921	3874 497
a. Saidpur	R U	2039 618	299 11	567 78	11 -	6514 443	926 42
b. Ghazipur	R U	2099 2755	204 71	283 485	16 1	5726 3917	600 404
c. Mohammadabad	R U	2173 1053	202 13	279 58	47 -	5027 561	825 51
d. Zamania	T	2398	141	450	9	6181	1523
13. Varanasi	R U	12310 40496	598 1085	8055 21510	72 293	43456 42353	2540 5761
a. Gyanpur	R U	2698 1977	196 69	638 342	5 10	7568 1992	526 149
b. Varanasi	R U	5003 36530	191 976	1888 16831	53 217	24137 38831	1158 5380
c. Chandauli	R U	3824 1630	155 26	5380 4279	11 66	9608 1144	701 202
							Contd.

Contd.

1	2	3	4	5	6	7
d. Chakia	R U	785 359	149 58	3 -	2143 386	155 30
14. <u>Mirzapur</u>	R U	5128 11023	2163 3568	34	19706 16310	1801 1630
a. Mirzapur	R U	1966 7129	826 2143	4 23	7534 7897	636 1117
b. Chunar	R U	1422 1197	679 307	3 -	5454 1342	556 231
c. Robertsganj	R U	1338 1474	495 910	2 11	4006 5041	342 165
d. Dudhi	R U	402 1223	163 208	- -	2792 2030	267 117
15. <u>Allahabad</u>	R U	5934 834	1518 147	10 5	16196 667	1290 48
a. Soraon	R U	2312 391	470 61	1 3	5152 250	466 25
b. Phulpur	R U	1818 443	687 88	9 1	6642 417	437 23
c. Handia	T	1804	360	1	4402	387
E.U.P.	R U	144754 129367	39530 54713	400 591	342093 148885	28272 17425

APPENDIX B4

Distribution of workers divided into males and females by occupational groups of Primary, Secondary and Tertiary Sectors in Urban Centres of Eastern Uttar Pradesh, 1971

Name of the urban centres	I. Cultivation		II. Agricultural labourers		III. Plantation & Orchards etc.		IV. Mining and Quarrying	
	M	F	M	F	M	F	M	F
1	2	3	4	5	6	7	8	9
1. Nanpara	484	17	671	55	39	-	1	-
2. Bahraich	2639	72	945	32	156	22	4	-
3. Bhinga	766	35	253	12	14	-	-	-
4. Balrampur	651	33	625	120	119	10	85	2
5. Tulsipur	195	9	133	7	23	1	-	-
6. Utraula	251	11	98	13	4	-	30	-
7. Gonda	710	49	680	59	90	5	4	-
8. Colonelganj	575	29	368	16	24	2	-	-
9. Nawabganj	330	20	265	26	21	7	-	-
10. Faizabad V.A.	2000	100	1841	275	273	6	37	1
a. Faizabad Ayo.	1928	99	1777	273	227	6	37	1
b. Faizabad Cant.	72	1	64	2	46	-	-	-
11. Gosaiganj	115	10	47	15	18	3	-	-
12. Jalalpur T.A.	436	4	133	4	-	-	1	-
13. Akbarpur T.A.	475	54	305	110	19	-	-	-
14. Tanda M.B.	597	23	416	191	28	-	16	-
15. Sultanpur	203	18	286	22	48	-	7	-
16. Pratapgarh	287	18	102	107	60	3	4	-
17. Bansi	1013	145	534	121	13	-	-	1
18. Basti	980	34	1545	306	87	1	-	1
19. Khalilabad	530	14	528	139	9	-	2	-
20. Gorakhpur	962	30	1423	159	262	2	17	2
21. Barhalganj	91	4	195	29	1	-	-	-
22. Padrauna	516	15	540	80	38	3	10	-
23. Siwarhi	112	3	259	47	4	-	-	-
24. Deoria	456	16	890	124	92	-	-	1
25. Gaura Barhaj	521	14	686	88	5	-	-	-
26. Kopaganj	97	9	160	58	2	1	-	-
27. Azamgarh	493	13	247	32	5	-	76	-
28. Maunath Bhanjan	492	49	543	139	45	9	37	1

Contd.

1	2	3	4	5	6	7	8	9
29. Mubarakpur	179	3	101	63	4	-	2	1
30. Muhammdabad	269	59	288	162	-	-	1	-
31. Sahaganj	257	21	29	1	22	1	-	-
32. Mogra Badshapur	311	13	184	55	3	2	-	-
33. Machhalishahar	356	20	126	44	2	-	-	-
34. Jaunpur	2367	116	948	210	302	9	25	-
35. Marlahu	312	26	161	41	4	-	-	-
36. Kerakat	227	4	38	2	1	1	-	-
37. Rasra	225	5	219	97	33	2	-	-
38. Reoti	798	50	1252	583	9	-	-	-
39. Ballia	646	9	868	142	85	-	8	-
40. Saidpur	495	10	193	45	181	7	-	-
41. Ghazipur	713	24	299	72	120	7	-	-
42. Mohammdabad	547	47	371	111	27	-	-	-
43. Bhadohi	464	47	528	147	111	17	-	-
44. Gopiganj	133	7	338	3	3	-	-	-
45. Gyanpur	47	2	93	6	4	-	-	-
46. Varanasi U.A.	3185	174	2307	407	921	49	72	3
a. Varanasi MC+RC	3165	174	2274	405	892	45	72	3
b. Varanasi MC	3165	174	2274	405	891	45	72	3
ii. R.C.	-	-	-	-	1	-	-	-
b. B.H.U.	6	-	7	1	8	3	-	-
c. Varanasi Cant.	14	-	26	1	21	1	-	-
47. Ramnagar	269	14	286	37	139	14	-	-
48. Maruadih	-	-	-	-	1	-	-	-
49. Lohta	112	111	31	52	1	-	-	-
50. Mughalsarai	46	-	6	3	40	-	3	-
a. NAC & Mughal-sarai M.A.	-	-	-	-	-	-	-	-
b. Mughalsarai MR	46	-	3	3	40	-	3	-
51. Chandauli	127	3	192	3	22	2	-	-
52. Chakiya	249	19	276	29	7	1	-	-
53. Mirzapur+Vin.	1066	105	1504	420	192	12	23	1
54. Kachhwa	371	8	298	128	2	-	23	1
55. Ahraura	599	16	487	199	27	3	4	1
56. Chunar	380	9	62	27	32	-	9	-

Contd.

1	2	3	4	5	6	7	8	9
57. Odra	8	-	13	1	45	-	-	-
58. Churk Ghuma	29	3	57	42	10	-	-	-
59. Robertsganj	49	2	84	37	18	-	-	-
60. Chopan	2	-	2	1	-	-	-	-
61. Markundi	101	4	142	85	-	-	1	-
62. Renukoot	-	-	141	3	14	-	-	-
63. Pipri	114	2	81	14	43	1	-	1
64. Dudhi	302	14	130	77	3	-	6	-
65. Mau Alma	141	11	146	62	3	1	-	-
66. Phulpur	318	24	204	114	16	-	-	-

Name of the urban centres	V. Manufacturing, Processing, Servicing & Repairs				VI. Construction				VII. Trade & Commerce				VIII. Transport & communication				IX. Other services															
	Va. Household				Vb. Other than Household				M				F				M				F				M				F			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F						
1	10	11	12	13	14	15	16	17	18	19	20	21																				
1. Nanpara	299	26	532	2	179	-	1223	18	154	-	1255	129																				
2. Bahraich	824	65	2926	30	748	6	5022	73	1055	4	5660	627																				
3. Bhinga	117	7	653	5	29	-	585	13	29	-	558	59																				
4. Balrampur	539	31	1284	30	359	1	1971	66	565	1	3094	385																				
5. Tulsipur	234	3	591	4	115	1	844	9	134	-	813	49																				
6. Utraula	162	16	544	11	139	2	853	23	94	1	1046	58																				
7. Gonda	614	83	1785	24	196	2	2946	83	2299	52	4343	572																				
8. Colongelganj	2	-	490	22	73	-	1022	12	57	-	536	42																				
9. Nawabganj	59	12	373	15	21	-	546	21	47	-	411	61																				
10. Faizabad VA	1273	53	3910	86	434	1	5490	214	2322	15	11464	1120																				
a. Faizabad Ayo.	1273	53	3817	82	433	1	5413	207	2273	15	8440	1039																				
b. Faizabad Cant.	-	-	93	4	1	-	77	7	49	-	3024	81																				
11. Gosaiganj	2	-	334	18	26	-	746	30	31	-	386	26																				
12. Jalalpur	1877	61	316	29	5	1	419	4	31	-	283	28																				
13. Akbarpur	29	1	814	12	94	-	865	26	109	-	603	36																				
14. Tanda	5077	1017	1921	132	89	4	1710	65	96	4	1507	245																				
15. Sultanpur	452	22	752	12	213	21	3186	79	673	3	2756	372																				
16. Pratapgarh	326	36	856	21	159	1	2757	87	525	1	2165	362																				
17. Bansi	320	17	160	1	42	-	642	25	43	-	566	50																				
18. Basti	522	30	1164	29	241	4	3343	98	677	1	4725	486																				
19. Khalilabad	414	14	600	5	44	-	1025	27	111	-	804	36																				
20. Gorakhpur	3591	425	6864	141	791	5	10894	316	16014	156	16877	2003																				
21. Barhalganj	428	821	214	1	34	-	599	22	39	-	404	21																				
22. Padrauna	320	26	1196	7	267	1	1361	42	292	4	1027	85																				
23. Siwarhi	82	1	427	3	19	-	724	3	40	-	263	13																				
24. Deoria	768	13	926	12	221	-	2416	33	473	3	3277	371																				
25. Gaura Barhaj	531	13	453	22	75	-	993	24	154	-	671	143																				
26. Kopaganj	2290	1149	132	6	25	1	634	53	28	-	185	37																				
27. Azamgarh	1005	109	923	26	298	-	2196	65	386	1	4132	363																				
28. Maunath Bhanjan	8225	6979	1842	105	226	9	2588	113	372	-	2336	279																				

Contd.

1	10	11	12	13	14	15	16	17	18	19	20	21
29. Mubarakpur	3905	1169	386	69	35	90	570	19	57	-	316	60
30. Mohammdabad	352	39	163	50	6	-	378	9	10	-	359	35
31. Sahaganj	353	32	212	2	68	1	1433	34	167	-	679	83
32. Mogra Badshapur	209	20	235	1	55	-	984	23	80	-	244	34
33. Machhalishahar	406	27	288	13	26	-	652	19	54	-	295	25
34. Jaunpur	1993	168	2680	117	573	1	5436	90	1093	4	4620	671
35. Marlahu	280	49	170	8	18	-	604	24	58	1	341	22
36. Kerakat	301	16	51	-	9	-	560	7	21	-	258	7
37. Rasra	388	65	339	27	53	-	978	21	41	4	705	67
38. Recti	178	14	7	-	2	-	312	20	19	-	252	28
39. Ballia	697	27	979	12	245	2	3081	97	415	3	4418	399
40. Saidpur	236	24	268	10	22	-	618	11	78	-	443	42
41. Ghazipur	665	69	1226	36	296	1	2755	71	485	1	3917	404
42. Mohammdabad	429	25	223	5	22	-	1053	13	58	-	561	51
43. Bhadohi	520	124	1523	115	61	4	1021	15	244	3	1148	78
44. Gopiganj	65	41	522	71	9	-	727	30	77	2	248	34
45. Gyanpur	120	26	84	6	15	-	229	14	21	5	596	37
46. Varanasi UA	37105	3042	21555	5856	2599	23	35667	928	16542	176	37180	5196
a. Varanasi MC+RC	36985	3035	21396	554	2591	23	35254	922	15366	162	34563	4718
i. Varanasi MC	36982	3034	21393	-	2591	23	35246	922	13901	127	34528	4706
ii. R.C.	3	1	3	-	-	-	8	-	1466	35	35	12
b. B.H.U.	3	-	31	-	2	-	170	1	42	-	1198	244
c. Varanasi Cant.	113	7	128	2	6	-	243	5	1133	14	1419	234
47. Ramnagar	696	52	818	14	94	1	726	40	214	1	1437	132
48. Maruadih	10	-	3030	-	12	-	41	-	51	39	103	42
49. Lohita	1142	253	103	20	4	-	96	8	24	1	111	10
50. Mughalsarai UA	153	3	1007	9	165	-	1277	15	4228	59	859	149
a. - NRC & Mughal-sarai UA	11	-	609	-	111	-	93	-	3384	87	350	51
b. Mughalsarai MB	142	3	398	9	54	-	1184	15	844	12	509	98
51. Chendauli	96	12	123	5	24	-	353	11	51	7	285	53
52. Chakiya	128	16	139	12	2	-	359	14	58	-	386	30
53. Mirzapur+vin.	1597	109	6366	158	579	3	6819	280	2106	23	7626	1067
54. Kachhwa	249	40	91	3	59	-	310	7	37	-	271	50
55. Ahraura	316	24	452	20	23	1	718	42	148	-	321	41
56. Chunar	256	71	209	8	52	1	479	19	159	-	1021	190

Contd.

1	10	11	12	13	14	15	16	17	18	19	20	21
57. Obra	105	3	308	1	439	1	568	14	135	-	4104	81
58. Churk Ghuma	21	2	1637	2	25	-	115	2	37	-	375	27
59. Robertsganj	233	6	134	1	46	-	768	31	117	-	470	55
60. Chopan	9	-	18	-	-	-	37	3	588	5	73	1
61. Markundi	7	-	39	-	-	-	21	1	33	6	19	1
62. Renukoot	29	-	3876	2	124	-	755	8	107	-	461	7
63. Pipri	52	1	211	-	71	-	253	8	70	-	1185	36
64. Dudhi	110	32	44	2	5	-	215	16	31	-	384	21
65. Mau Alma	613	51	309	5	27	1	397	7	61	3	250	5
66. Phulpur	220	17	341	41	4	-	443	17	37	1	417	23

APPENDIX C
FURTHER READING

BOOKS

1. Balchin, W.G.V. "Geography and Man", Vols. I, II & III.
2. Berger, P.L. (Ed.) "The Human Shape of Work: Studies in the Sociology of Occupations."
2. Charles, Booth "Occupations of the People" (London) 1886.
3. Coale, A.J. and Hoover, E.M. "Population Growth and Economic Development in Low Income Countries", Ed. 1959.
4. Das, Nabagopal "Unemployment, Full Employment and India".
5. Dubey, R.N. "Economic Geography of Indian Republic", Elld. Ed. 1957.
6. Demko, G.R.; Rose, H.M. and Schnell, G.A. "Population Geography: A Reader: Part II (Population growth, History, Theory and Policy)", Ed. 1977.
7. Gadgil, D.R. "Women in the Working Force in India".
8. Ghose, D.S.K. "Change of Occupation".
9. Ghose, Subrathesh "Indian Labour in the Phase of Industrialisation".
10. Ghurya, G.S. 1. Caste and class in India; 2. Caste, Class and Occupation; 3. Culture and Society; 4. India's Population Problems; 5. Scheduled Tribes.
11. Gyan Chand "India's Teeming Millions", London 1939.
12. Hamilton, M.A. "Women at Work".
13. Hansen, A.H. "Economic Policy and Full Employment".
14. Jaffee, A.J. and Stewart, C.D. "Manpower Resources and Utilisation," New York, 1951.
15. Lorry, C.D. "The Labour Force Under Changing Income and Employment", Princeton, 1958.
16. Mukerjee, R.K. "The Indian Working Class".
17. Singh, Baljit "Population and Food Planning in India".

18. Singh, Kashi Nath "Rural Markets and Rurban Centres in Eastern U.P.: A Geographical Analysis", Ph.D. Thesis (unpublished), B.H.U. Varanasi, 1962.
19. Thurn, W. Richard "Economics in Primitive Communities", London, 1932.
20. Tewari, R.N. "Location and Development of Large Scale Industries in Uttar Pradesh", Vols. I and II (unpublished), Thesis for D. Litt, 1963.
21. Sharma, R.C. "Settlement Geography of the Indian Desert", New Delhi, 1972.
22. Yoder, Dale "Man-Power Economics and Labour Problems", New York, 1950.

ARTICLES

23. Adyanathya, N.K. "Women's Employment in India - International Review", July 1954.
24. Ahmad, E. "Rural Settlement Types in Uttar Pradesh", Annals A.A.G. 42, 1952, pp. 223-246.
25. Auroousseau, M. "The Arrangement of Rural Population" Geographical Review 10, 1920, pp. 223-240.
26. Bohra, D.M. "Internal Migration in Rajasthan", Ind. Jl. Geog. IV-VI, 1 (1969-71), 47-57.
27. Chandna, R.C. "Scheduled Caste Population in Rural Haryana: A Geographical Analysis", N.G.J.I. XVIII, 3 & 4 (1972), pp. 177-86.
28. Curry, L. "A Note on Spatial Association, Professional Geographer", XVIII (1966).
29. Dickinson, R.E. "The Distribution and Functions of the Smaller Urban Settlements of East Angalia", 16, 1932, pp. 19-31.
30. Eckler, A.R. "Occupational Changes in U.S.A. (1850-1920)", in Review Economics and Statistics, Vol. XII, 1930, pp. 77-87.
31. Giri, D. "Trends in the World's Agricultural Population", Geography, LVI, 4 (1971), pp. 320-24.
32. Garrison, W.L. and Marble, D.F. "The Spatial Structure of Agricultural Activities", Annals, A.A.G. 47, 1957.